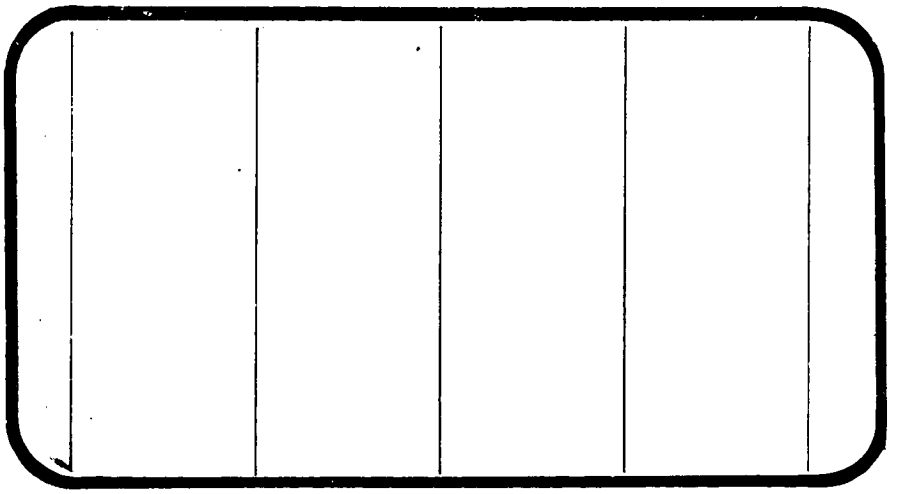
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UNITARY PLAN WIND TUNNELS ON AN
0.030-SCALE MODEL OF THE SPACE (Chrysler
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SPACE SHUTTLE

AEROTHERMODYNAMIC DATA REPORT

JOHNSON SPACE CENTER

HOUSTON, TEXAS

DATA MANagement services

SPACE DIVISION CHRYSLER CORPORATION

February, 1974

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NASA CR-128,794

VOLUME 13 of 18

RESULTS OF TESTS OA12 AND IA9 IN THE AMES RESEARCH CENTER UNITARY PLAN WIND TUNNELS ON AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE VEHICLE 2A TO DETERMINE AERODYNAMIC LOADS

By

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Prepared under NASA Contract Number NAS9-13247

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Johnson Space Center
National Aeronautics and Space Administration
Houston, Texas

WING TUNNEL TEST SPECIFICS:

Test Numbers:	ARC 11-707 (A) ARC 97-707 (B) ARC 87-707 (C)
NASA Series Numbers:	IA9A, B, C and OA12A, C
Test Date:	2 April - 17 May, 1973

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Chrysler Corporation Space Division Assumes no responsibility for the data presented herein other than its display characteristics.

RESULTS OF TESTS OA1? AND IA9 IN THE AMES RESEARCH CENTER UNITARY PLAN WIND TUNNELS ON AN 0.030-SCALE MODEL OF THE SPACE SHUTTLE VEHICLE ?A TO DETERMINE AERODYNAMIC LOADS

By

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ABSTRACT

Tests were conducted in the NASA/ARC Unitary Plan Wind Tunnels during April and May 1973, on an 0.030-scale replica of the Space Shuttle Vehicle Configuration A. Aerodynamic loads data were obtained at Mach numbers from 0.6 to 5.0.

The investigation included Tests IA9A, B and C on the integrated (launch) configuration and Tests OA1CA and C on the isolated orbiter (entry configuration). The integrated vehicle was tested at angles of attack and sideslip from -8 degrees to +8 degrees. The isolated orbiter was tested at angles of attack from -15 degrees to +40 degrees and angles of sideslip from -10 degrees to +10 degrees as dictated by trajectory considerations. The effects of orbiter/external tank incidence angle and deflected control surfaces on aerodynamic loads were also investigated.

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INTRODUCTION

The 0.030-scale Aero Loads Space Shuttle model was tested in the Unitary Plan Wind Tunnels at ARC starting April 2, and continuing through May 17, 1973 as follows:

IA9A	11-foot Transonic	April 2 to April 14, 1973
OA12A	11-foot Transonic	April 16 to April 29, 1973
IA9C	8x7-foot Supersonic	April 23 to May 1, 1973
OA12C	8x7-foot Supersonic	May 2 to May 8, 1973
IA9B	9x7-foot Supersonic	May 9 to May 17, 1973

The testing was conducted in all three legs of the Unitary Plan Wind Tunnels to obtain a Mach number range from 0.6 to 3.5. Aerodynamic loads data were obtained for the ascent and entry configurations. The effects of control surface deflections were also investigated.

This report consists of 3 volumes of force data and 15 volumes of pressure data for a total of 18 volumes arranged in the following manner:

VOLUME NO.	CONTENTS
1	IA9A force data
2	IA9B and IA9C force data
3	OA12A and OA12C force data
4	IA9A plotted pressure data
5	IA9B and IA9C plotted pressure data
6	OA12A and OA12C plotted pressure data
7	IA9A tabulated pressure data (a) orbiter fuselage (b) orbiter base (c) upper MPS nozzle
8	IA9A tabulated pressure data (a) OMS nozzle (b) body flap (c) OMS pod outside (d) lower wing surface
9	IA9A tabulated pressure data (a) upper wing surface (b) left vertical tail surface (c) right vertical tail surface (d) APU inlet (e) SRM booster base
10	IA9A tabulated pressure data (a) SRM booster (b) external tank (c) external tank base

11 IA9B tabulated pressure data
- (a) orbiter fuselage
- (b) orbiter base
- (c) upper MPS nozzle
- (d) OMS nozzle
- (e) body flap
- (f) OMS pod outside
- (g) lower wing surface

12 IA9B tabulated pressure data
- (a) upper wing surface
- (b) left vertical tail surface
- (c) right vertical tail surface
- (d) APU inlet
- (e) SRM booster base
- (f) SRM booster
- (g) external tank
- (h) external tank base

13 IA9C tabulated pressure data
- (a) orbiter fuselage
- (b) orbiter base
- (c) upper MPS nozzle
- (d) OMS nozzle
- (e) body flap
- (f) OMS pod outside

14 IA9C tabulated pressure data
- (a) lower wing surface
- (b) upper wing surface
- (c) left vertical tail surface
- (d) right vertical tail surface

15 IA9C tabulated pressure data
- (a) APU inlet
- (b) SRM booster base
- (c) SRM booster
- (d) external tank
- (e) external tank base

16 OA12A tabulated pressure data
- (a) orbiter fuselage
- (b) orbiter base
- (c) upper MPS nozzle
- (d) OMS nozzle
- (e) body flap
- (f) OMS pod outside

17 OA12A tabulated pressure data
- (a) lower wing surface
- (b) upper wing surface
- (c) left vertical tail surface
- (d) right vertical tail surface
- (e) APU inlet

18 OA12C tabulated pressure data
- All components

NOMENCLATURE
General

SYMBOL	SADSAC SYMBOL	DEFINITION
a		speed of sound; m/sec, ft/sec
C_p	CP	pressure coefficient; $(p_l - p_\infty)/q$
M	MACH	Mach number; V/a
p		pressure; N/m^2, psf
q	Q(NSM) Q(PSF)	dynamic pressure; $1/2\rho V^2$, N/m^2, psf
RN/L	RN/L	unit Reynolds number; per m, per ft
V		velocity; m/sec, ft/sec
α	ALPHA	angle of attack, degrees
β	BETA	angle of sideslip, degrees
ψ	PSI	angle of yaw, degrees
ϕ	PHI	angle of roll, degrees
ρ		mass density; kg/m^3, $slugs/ft^3$
		Reference & C.G. Definitions
A_b		base area; m^2, ft^2
b	BREF	wing span or reference span; m, ft
c.g.		center of gravity
ℓ_{REF} $\bar{c}$	LREF	reference length or wing mean aerodynamic chord; m, ft
S	SREF	wing area or reference area; m^2, ft^2
	MRP	moment reference point
	XMRP	moment reference point on X axis
	YMRP	moment reference point on Y axis
	ZMRP	moment reference point on Z axis

SUBSCRIPTS

b	base
l	local
s	static conditions
t	total conditions
∞	free stream

NOMENCLATURE (Continued)

Body-Axis System

SYMBOL	SADSAC SYMBOL	DEFINITION
C_N	CN	normal-force coefficient; $\frac{\text{normal force}}{qS}$
C_A	CA	axial-force coefficient; $\frac{\text{axial force}}{qS}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_{A_b}	CAB	base-force coefficient; $\frac{\text{base force}}{qS}$ $-A_b(p_b - p_\infty)/qS$
C_{A_f}	CAF	forebody axial force coefficient, $C_A - C_{A_b}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CYN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CBL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
		Stability-Axis System
C_L	CL	lift coefficient; $\frac{\text{lift}}{qS}$
C_D	CD	drag coefficient; $\frac{\text{drag}}{qS}$
C_{D_b}	CDB	base-drag coefficient; $\frac{\text{base drag}}{qS}$
C_{D_f}	CDF	forebody drag coefficient; $C_D - C_{D_b}$
C_Y	CY	side-force coefficient; $\frac{\text{side force}}{qS}$
C_m	CLM	pitching-moment coefficient; $\frac{\text{pitching moment}}{qS\ell_{REF}}$
C_n	CLN	yawing-moment coefficient; $\frac{\text{yawing moment}}{qSb}$
C_ℓ	CSL	rolling-moment coefficient; $\frac{\text{rolling moment}}{qSb}$
L/D	L/D	lift-to-drag ratio; C_L/C_D
L/D_f	L/DF	lift to forebody drag ratio; C_L/C_{D_f}

NOMENCLATURE (CONTINUED)

ADDITIONS TO STANDARD LIST

SYMBOL	PLOT SYMBOL	DEFINITION
δ_R	RUDDER	rudder, surface deflection angle, positive deflection, trailing edge to the left; degrees.
δ_e	ELEVON	elevon, surface deflection angle, positive deflection, trailing edge down; degrees.
δ_{RF}	RUDFLR	rudder flare, split rudder deflection angle, left split rudder trailing edge left and right split rudder trailing edge right, $\delta_{RF} = (\delta_{RL} + \delta_{RR})/2$, positive deflection; degrees.
i_o	ORBINC	incidence angle between the orbiter and external tank, $i_o = \alpha_t - \alpha_t$; degrees.
β_T	BETAT	angle of sideslip of external tank.
α_T	ALPHAT	angle of attack of external tank.
ℓ_B	LB	length of orbiter body; in.
ℓ_T	LT	length of external tank; in.
ℓ_s	LS	length of SRM booster; in.
ℓ_{NM}	LNM	length of OMS nozzle, positive direction forward of exit plane; in.
ℓ_{NP}	LNP	length of MPS nozzle, positive direction forward of exit plane; in.
b/2	BW	wing semi-span; in.
b_v	BV	vertical tail span; in.
x	X	distance from component nose; in.
y	Y	lateral distance from centerline; in.

NOMENCLATURE (CONCLUDED)

SYMBOL	PLOT SYMBOL	DEFINITION
z	Z	vertical distance measured from W.L. 500 (vertical tail reference root chord); in.
c_w	CW	local wing chord; in.
c_v	CV	local vertical tail chord; in.
x/ℓ_B	X/LB	longitudinal position/orbiter body length.
x/ℓ_T	X/LT	longitudinal position/external tank length.
x/ℓ_S	X/LS	longitudinal position/booster length.
x/ℓ_{NM}	X/LNM	longitudinal position/OMS nozzle length.
x/ℓ_{NP}	X/LNP	longitudinal position/MPS nozzle length.
x/c_w	X/CW	local chordwise position/local wing chord length.
x/c_v	X/CV	local chordwise position/local vertical tail chord length.
y/b/2	Y/BW	local spanwise position/wing semi-span.
z/b_v	Z/BV	local spanwise position/vertical tail span.

CONFIGURATIONS INVESTIGATED

The 0.030-scale aero loads model was a replica of the Space Shuttle Vehicle 2A. It consisted of four major components: the orbiter, the external oxygen and hydrogen tank (ET) and two solid rocket boosters (SRB).

On the ascent configuration, the orbiter was strut mounted from the ET on a Task Corporation MK XVI 2.5-inch diameter internal balance. The left SRB was strut mounted from the ET on a Task Corporation MK XXII 1.5-inch diameter internal balance. No attempt was made to simulate actual inter-attachments. The ET was sting mounted to the tunnel model support system on a Task Corporation 4.0-inch diameter internal balance. The right SRB was strut mounted symetrically to the left side, but did not contain a balance. The orbiter configuration, designated as O_{2A}, consisted of $B_1OC_5D_7W_8V_5R_5M_3F_4$.

The entry configuration consisted of the isolated orbiter, sting mounted to the tunnel model support system on a Task Corporation MK XXA 2.5-inch diameter internal balance. Midway through the OA12C test, the MK XXA balance was damaged and was replaced by the MK XXB for the high angles of attack. The orbiter was provided with deflectable elevons by means of interchangeable brackets, deflectable rudder by means of a pin-indexed hinge, and interchangeable rudders to obtain different speed brake flare angles. The main propulsion system engines were removed during entry configuration testing to provide sting clearance. A cover plate was provided for the strut clearance hole.

The orbiter was instrumented with 374 pressure orifices on the left wing, left side of the fuselage, vertical tail, left OMS pod and engine, left and upper MPS engine and the base. The pressures were measured using eleven Scanivalve, Inc., S-type valve modules mounted internally (a five and a six gang unit). When tested in the entry configuration, the MPS pressures were not available for measurement.

The left side of the ET was instrumented with 136 pressure orifices. These pressures were measured by means of 7 Scanivalve, Inc., S-type valve modules configured as one unit of 6 modules and one single. These valves were mounted internally in the tank. The left SRB had one gang of six S-type modules to measure 102 pressures. The right SRB was not instrumented. The pressure transducers used in the valve modules were Statham PM 131 TC differential pressure transducers, with ranges of ± 10 psid, ± 12.5 psid and ± 15 psid. Reference and calibration pressures were measured by the ARC micro manometers.

Some modifications were made to the model at the test site prior to

testing. These were as follows:

1. The forward tip of the ET containing the retro rocket package (Reference NR Drawing VL78-000018) was replaced with a flush 0.90 inch radius nose (Model scale). The new nose had five pressure taps; one in the nose and four more aft of the nose on the vertical and horizontal axis on a 0.315 inch radius.

2. The ET balance cavity was enlarged by one inch on the diameter (from 5 inches to 6 inches) to provide clearance for cable routing and eliminate balance interference.

3. The clearances around both the orbiter and the SRB struts were opened to approximately 1/8 inch to prevent interference.

4. An alternate rudder hinge pin was provided to give a rudder deflection of +15 degrees.

Before and during the tests various model discrepancies developed or were discovered. These were generally minor and had only a negligible, if any, effect on the data. Significant discrepancies are noted below:

1. Pressure orifices P171 and P173 on the OMS pod base were omitted.

2. During the test certain pressure taps developed leaks or became plugged. Data from these taps are questionable and should be used with caution. Difficulties in checking may have resulted in erroneous indications of leakage. Repairs were made to correct leaking or plugged pressure instrumentation, whenever possible, as the test progressed. The following list gives those taps that were indicated as bad on the various leak and response checks:

ARC Facility	Run Nos.	Orifice numbers with questionable pressure data
11'	2-4	72, 163, 427
↓	5-118	31, 100, 123, 163, 201, 427
	119-160	16, 98, 101, 107, 333, 427
	161-170	16, 98, 101, 107, 333, 427 + 306, 307, 327, 328, 336, 337, 356, 357, 375

CONFIGURATIONS INVESTIGATED (CONCLUDED)

ARC Facility	Run Nos.	Orifice numbers with questionable pressure data
11'	171-182	16, 47, 53, 75, 78, 98, 107, 201, 236, 237, 238, 307, 327, 365, 427
↓	183-189	Same as (171-182) + 7, 447, 525
	190-211	Same as (171-182)
8'x7'	220-234	20, 21, 24, 74, 326, 327, 336, 424, 427, 752, 868, 871
↓	235-285	74, 326, 327, 336, 424, 427, 752, 868, 871
	286-300	74, 107, 115, 124, 129, 138, 326, 327, 336, 427
	301-305	74, 326, 327, 336, 427
	306-333	74, 326, 327, 427
9'x7'	340-396	5, 325, 326, 327, 424, 427, 526, 752, 868, 871

TEST FACILITIES DESCRIPTION

Ames 11 x 11-Ft. Transonic

The Ames 11 x 11-Foot Transonic Wind Tunnel is a variable density, closed return, continuous flow type. This tunnel has an adjustable nozzle (two flexible walls) and a slotted test section to permit transonic testing over a Mach number range continuously variable from 0.4 to 1.4.

Ames 8 x 7-Ft. Supersonic

The Ames 8 x 7-Foot Supersonic Wind Tunnel is a closed-return, variable-density tunnel with a 8- by 7-foot rectangular test section. The nozzle has flexible side walls with fixed upper and lower surfaces. Mach number range is continuously variable from 2.45 to 3.5. Tunnel stagnation pressure can be varied from 0.3 to 2.0 atmospheres and Reynolds number per foot varies from 1.0×10^6 to 5.0×10^6.

Ames 9 x 7-Ft. Supersonic

The Ames 9 x 7-Foot Supersonic Wind Tunnel is a variable density, continuous flow type with an adjustable nozzle to permit supersonic testing over a Mach number range continuously variable from 1.5 to 2.5. The nozzle is of the asymmetric, sliding-block type in which the variation of the test section Mach number is achieved by translating, in the streamwise direction, the fixed-contour block that forms the floor of the nozzle.

DATA REDUCTION

Standard procedures were utilized to reduce force and pressure data to coefficient form. The following dimensional constants were applied:

Reference Dimensions and Constants (Model Scale)

$S_{Ref.} = 2.421\ ft^2$	Orbiter reference area
$\ell_{Ref.} = 39.849$ in.	Orbiter reference length

Base Areas (Model Scale)

$A_{BOI} = 0.1903\ Ft^2$	Orbiter base area, integrated
$A_{BOA} = 0.2362$	Orbiter base area, sting mounted
$A_{BMPSU} = 0.0417$	Orbiter upper MPS base area
$A_{BMPSL} = 0.0853$	Orbiter lower MPS base area
$A_{BACPS} = 0.0310$	Orbiter ACPS base area on OMS pod
$A_{BOMS} = 0.0231$	Orbiter OMS nozzle base area
$A_{BPOD} = 0.0257$	Orbiter OMS pod base area
$A_{CO} = 0.0611$	Orbiter sting cavity base area
$A_{BNOZ} = 0.0564$	SRM nozzle base area
$A_{BSKIRT} = 0.1729$	SRM nozzle skirt base area
$A_{BETI} = 0.3189$	ET Base area
$A_{CET} = 0.1964$	ET Sting cavity base area

TEST : OA12 / IA9 | TABLE I. | DATE : May, 1973

TEST CONDITIONS

MACH NUMBER	REYNOLDS NUMBER (per unit length)	DYNAMIC PRESSURE (pounds/sq. foot)	STAGNATION TEMPERATURE (degrees Fahrenheit)
0.6	4.0×10^6	540	120° NOM.
0.9	4.5	800	
1.1	4.0	800	
1.25	3.0	630	
1.4	3.0	650	
1.55	2.8	600	
2.0	2.3	490	
2.5	1.5	300	
3.0	1.0	350	
3.5	2.0	300	

BALANCE UTILIZED: FIVE (5) TASK CORPORATION BALANCES WITH CAPACITIES AS FOLLOWS:

	ISOLATED ORBITER MK XXIA	ISOLATED ORBITER MK XXIB	INTEGRATED VEHICLE ORB MK XXIB	INTEGRATED VEHICLE SRB MK XXI	INTEGRATED VEHICLE ET MK XXIB
N_F	3000	3000	2400	1250	4000
N_A	3000	3000	2400	1250	4000
Y_F	1500	1500	1200	500	2000
Y_A	1500	1500	1200	500	2000
X	600	600	1500	200	1000
R	4000	4000	4000	1000	10,000
SIZE	2.5"	2.5"	2.5"	1.5"	4.0"

COMMENTS: THE MARK XXIA, 2.5IN DIA. BALANCE WAS DAMAGED AFTER RUN 319. THE MARK XXIB WAS SUBSTITUTED FOR RUN 320 AND SUBSEQUENT RUNS

TABLE II.

TEST: ARC 11-707(IA9A) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: 4-27-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_R	δ_{FR}	l_o	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.1	1.25	1.4	TEST RUN NUMBERS
RBMx 01	ϕ_{2A} + S_3 + T_9	A	0	0	0	0	1.5	4	3	5	6	7		
02	~	A	0	~	~	~	0.5	5	8	18	28	38	48	
03		-8	B				~	4	9	19	29	39		
04		-6	~					~	10	20	30	40		
05		-4							11	21	31	41		
06		-2						↓	12	22	32	42		
07		0						5	13	23	33	43	49	
08		2						4	14	24	34	44		
09		4						~	15	25	35	45		
10		6							16	26	36	46		
11		8	↓		↓			↓	17	27	37	47		
12		-8	C		-5			2			97	102		
13		-6	~		~			~			118	111		
14		-4									98	103		
15		-2									117	112		
16		0									99	104		
17		2									116	113		
18	↓	4	↓	↓	↓	↓	↓	↓			100	105		

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES — COEFFICENTS: $\alpha A = -8,-6,-4,-2,0,2,4,6,8$; $\beta B = -8,-6,-4,-2,0,2,4,6,8$; $\beta C = -8,-4,0,4,8$

IDVAR (1) IDVAR (2) NDV

TABLE II. CONTINUED

TEST: ARC - 11 - 707 (IA 9?)

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE: ~ - - .

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_R	δ_{FR}	C_o	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.1	1.25
RBMx 19	ϕ_{2A} + S_3 + T_7	6	C	0	-5	0	0.5	2			115	114
20		8			-5						101	106
21		-8			-10						60	69
22		-6									61	70
23		-4									62	71
24		-2									63	72
25		0									64	73
26		2									65	74
27		4									66	75
28		6									67	76
29		8									68	77
30		-8			-15						78	88
31		-6									79	89
32		-4									80	90
33		-2									81	91
34		0									82	92
35		2									83	93
36		4									84	94

TEST RUN NUMBERS

1 7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

TABLE II. CONTINUED

TEST: ARC 11-707 (I...

DATA SET/RUN NUMBER COLLATION SUMMARY

DATE:

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_R	δ_{FR}	i_o	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.1	1.25	TEST RUN NUMBERS
RBMx 37	$\phi_{2A} + S_3 + T_3$	6	C	0	-15	0	0.5	2			85	95	
38		8			-15						87	96	
39		-8			-5						50	55	
40		-4									51	56	
41		0									52	57	
42		4									53	58	
43		8									54	59	
44		A	0		0		-1.2	4	107	108	109	110	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICENTS IDVAR (1) IDVAR (2) NDV

α OR β SCHEDULES

TABLE II. CONTINUED

TEST: ARC 97-707(IA9B) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: 5-17-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_R	i_o	δ_{RF}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.55	2.0	TEST RUN NUMBERS
RB0x 01	$\emptyset_{2A} + S_3 + T_9$	A	0	0	0	0.5	0	2	341	351	
02		8	B						342	360	
03		6							343	359	
04		4							344	358	
05		2							345	357	
06		0							346	356	
07		-2							347	355	
08		-4							348	354	
09		-6							349	353	
10		-8							350	352	
11		-8	C		-15				361	367	
12		-4							362	368	
13		0							363	369	
14		4							364	370	
15		6							365	371	
16		8							366	372	
17		-8			-10				373	379	
18		-4			-10				374	380	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES — COEFFICENTS — IDVAR (1) — IDVAR (2) — NDV

α(A) = -8, -6, -4, -2, 0, 2, 4, 6, 8

β(B) = 8, 6, 4, -4, -6, -8

β(C) = 8, 6, 4, 0, -4, -6, -8

TABLE II. CONTINUED

TEST: ACC 97-737 (TAPE) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: 5-17-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δe	δR	i_o	δ_{RF}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 1.55	2.0	TEST RUN NUMBERS
PBC19	$\phi_{2A} + S_2 + T_q$	0	C	0	-10	0.5	0	2	375	381	
20		4							376	382	
21		6							377	383	
22		8			+15				378	384	
23		-8							385	391	
24		-4							386	392	
25		0							387	393	
26		4							388	394	
27		6							389	395	
28		8							390	396	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICENTS

α OR β SCHEDULES

IDVAR (1) IDVAR (2) NDV

TABLE II. CONTINUED

TEST: ARC 8×7-707 (IA9C) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: 5-1-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_R	δ_{FR}	i_o	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.5	3.0	3.5	TEST RUN NUMBERS
RBNx01	$\emptyset_{2A} + S_3 + T_9$	A	0	0	0	0	0.5	3	240	230	220	
02		-8	B						241	231	221	
03		-6							242	232	222	
04		-4							243	233	223	
05		-2							244	234	224	
06		0							245	235	225	
07		2							246	236	226	
08		4							247	237	227	
09		6							248	238	228	
10		8							249	239	229	
11		-8	C		-15				267	256	250	
12		-4							266	257	251	
13		0							265	258	252	
14		4							264	259	253	
15		6							263	260	254	
16		8							262	261	255	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES — COEFFICENTS

$\alpha A = -8, -6, -4, -2, 0, 2, 4, 6, 8$

$\beta B = -8, -6, -4, -2, 0, 2, 4, 6, 8$

$\beta C = -8, -6, -4, 0, 4, 6, 8$

IDVAR (1) IDVAR (2) NDV

TABLE II. CONTINUED

TEST: ARC 8×7-707 (IA9C) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: 5-1-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	δ_e	δ_R	δ_{FR}	i_0	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.5	3.0	3.5	TEST RUN NUMBERS
RBN×17	ϕ_{2A} i S_3 + T_9	-8	C	0	-10	0	0.5	3	274	280*	268	
18		-4							275	281*	269	
19		0							276	282*	270	
20		4							277	283*	271	
21		6							278	284*	272	
22		8							279	285*	273	

7 13 19 25 31 37 43 49 55 61 67 75 76

COEFFICENTS — IDVAR(1) IDVAR(2) NDV

α OR β SCHEDULES

* NOTE: RUNS 280-285: β SCHEDULE IS: -8, -4, 0, 4, 8

TABLE II. CONTINUED

TEST : AIES 11-707 (0A12A) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE : 4-23-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	PARAMETERS/VALUES δ_R	PARAMETERS/VALUES δ_{FR}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.9	TEST RUN NUMBERS
RBPX01	$B_{10}C_5D_7N_2F_4M_3N_8V_5R_5W_{87}E_{10}$	A	0	0	0	0	2	119	125	
02		0	B					120	126	
03		5						121	127	
04		10						122	128	
05		15						123	129	
06		20						124	130	
07		0	C		-10			131	136	
08		5						132	137	
09		10						133	138	
10		15						134	139	
11		20						135	140	
12		0			-20			141	146	
13		5						142	147	
14		10						143	148	
15		15						144	149	
16		20						145	150	
17		0	D	10	0			151	156	
18		5	D	10	0			152	160	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES — COEFFICENTS — IDVAR (1) — IDVAR (2) — NDV

α A = MAX, 0, 5, 10, 15, 20, 25

β B = -10, -5, 5, 10

β C = 8, -4, 0, 4, 8

β D = -10, 0, 10

β E = -5, 0, 5

TABLE II. CONTINUED

TEST: AMES 11-707 (OA12A) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: 4-23-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δe	δR	δFR	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	TEST RUN NUMBERS
RBR19	$B_{10}C_5D_7N_2F_4M_3N_8V_5R_5W_{87}E_{18}$	10	D	+10	0	0	2	153	157	
20		15						154	159	
21		20						155	158	
22		0	C	-10				161	166	
23		5						162	167	
24		10						163	168	
25		15						164	169	
26		20						165	170	
27		-4	E	-20				171	182	
28		0	C					172	181	
29		5						173	180	
30		10						174	179	
31		15						175	178	
32		20						176	177	
33		-4	E	0	0	40		183	189	
34		0	C					184	190	
35		5						185	191	
36		10						186	192	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES — COEFFICENTS — IDVAR (1) — IDVAR (2) — NDV

α A = -MAX, 0, 5, 10, 15, 20, 25

β B = -10, -5, 5, 10

β C = -8, -4, 0, 4, 8

β D = -10, 0, 10

β E = -5, 0, 5

TABLE II. CONTINUED

TEST: AMES 11-707 (OA12A) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: 4-23-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_e	δ_R	δ_{FR}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 0.6	0.9	1.1	1.25	1.4	TEST RUN NUMBERS
REPEAT	$B_1 C_5 D_7 N_2 F_4 M_3 N_8 V_6 R_5 W_{17} L_{18}$	15	C	0	0	40		187	193				
38		20	C			40		188	194				
39		F	O			0				199	197	195	
40		G5	G							200	198	196	
41		-4	E		-10			201	202				
42		-4	E		-20			203	204				
43		-4	E	10	0	0		205	206				
44		-4	E	-10				207	208				
45		-4	E	0				210	209				
46		H	O					216	211				
47		-5	I					215	212				
48		-10	I					214	213				

7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES — COEFFICIENTS — IDVAR(1) — IDVAR(2) — NDV

α_F = -4.5, -3.5, -1.5, 0.5, 2.5, 4.5, 6.6, 8.6, 10, 15 α_H = 0, -5, -10, -15

β_G = -8, -4, -2, 0, 2, 4, 8 β_I = -10, -5, 5, 10

TABLE II. CONTINUED

TEST: 87-707 (0A12C) | DATA SET/RUN NUMBER COLLATION SUMMARY | DATE: 5-9-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δ_c	δ_R	δ_{FR}	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.5	3.5	TEST RUN NUMBERS
R8Qx01	$B_{10}C_6C_7N_2F_4N_3N_2V_5F_1N_2F_1$	A	0	0	0	40	2	290	286	
02		5	B					293	289	
03		10	C					292	288	
04		20	C					291	287	
05		0	D		-20			297	294	
06		10						298	295	
07		20						299	296	
08		0		10	0			303	300	
09		10						304	301	
10		20						305	302	
11		0		-20				309	306	
12		10						310	307	
13		20						311	308	
14		0		-40				317	314	
15		10						318	315	
16		20						319	316	
17		E	0	0				322	320	
18		30	D	0				323	321	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES

COEFFICENTS

$\alpha A = 0, 5, 10, 15, 20$

$\alpha B = 3, -3$

$\alpha E = 15, 20, 25, 30, 35, 10$

IDVAR (1) $\beta C = 6, 3, -3, -6$

IDVAR (2) $\beta D = 6, 3, 0, -3, -6$

NDV

TABLE II. CONCLUDED

TEST: 87-707 (ØA12C) — DATA SET/RUN NUMBER COLLATION SUMMARY — DATE: 5-9-73

DATA SET IDENTIFIER	CONFIGURATION	SCHD. α	SCHD. β	PARAMETERS/VALUES δe	PARAMETERS/VALUES δR	PARAMETERS/VALUES δFR	NO. OF RUNS	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 2.5	MACH NUMBERS (OR ALTERNATE INDEPENDENT VARIABLE) 3.5	TEST RUN NUMBERS
RBQx 19	B10C5 D, N2 F4 M3 id4 V6 F5 M7 F8	30	D	0	-20	40	2	325	324	
20		30	D	10	0	40		327	326	
21		30	D	-20	0	40		329	328	
22		20	F	0	0	40		332	330	
23		15	G	0	0	40		333	331	

1 7 13 19 25 31 37 43 49 55 61 67 75 76

α OR β SCHEDULES — COEFFICENTS: BF = 10, 6, 0, -6, -10; β = 1, ..., -6 — IDVAR (1) — IDVAR (2) — NDV

TABLE III. MODEL COMPONENT DIMENSIONAL DATA

MODEL COMPONENT: B10 Body

GENERAL DESCRIPTION: Fuselage, 2A Configuration, Lightweight Orbiter, per Rockwell Lines VL70-000089 "B."

Scale Model = .030

DRAWING NUMBER: VL70-000089 "B"
VL70-000092, 93, 94 "A"

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length ~ IN	1328.3	39.8490
Max. Width ~ IN ($@X_o$ = 1528.3)	265.0	7.9500
Max. Depth ~ IN. ($@X_o$ = 1480.52)	248.0	7.4400
Fineness Ratio	5.012	5.012
Area ~ Ft^2		
Max. Cross-Sectional	456.4	.41076
Planform		
Wetted		
Base		

TABLE III. (CONTINUED)

MODEL COMPONENT: Canopy - C5

GENERAL DESCRIPTION: 2A Configuration per Lines VL70-000092

Scale Model = .030

DRAWING NUMBER: VL70-000092

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length (STA FWD Bulkhead)	391.0	11.730
Max. Width (T.E. Bulkhead)	560.0	16.800
Max. Depth (WP = 42.9 22 to = 500)		
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

TABLE III. (CONTINUED)

MODEL COMPONENT: Manipulator Housing D-7

GENERAL DESCRIPTION: 2A Configuration per Rockwell Lines VL70-000093

Scale Model = .030

DRAWING NUMBER: VL70-000093

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length ~ IN.	881.00	26.430
Max. Width ~ IN.	51.00	1.530
Max. Depth ~ IN.	23.00	.690
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

C Fuselage BP = 0.00

WP = 500.0 IN. FS

X.426.0 to 1307.0 IN. FS

TABLE III. (CONTINUED)

MODEL COMPONENT: WING-W87 New Light Weight Orbiter

GENERAL DESCRIPTION: Orbiter Configuration Per Lines VL70-000093.

NOTE: (Dihedral Angle is defined at the lower surface of the Wing at the 75.33% element line projected into a plane perpendiculary.

Scale Model = .030

TEST NO.

DWG. NO. VL70-000093

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo.) Ft^2		
Planform		
Span (Theo In.	2690.00	2.42100
Aspect Ratio	936.68	28.10040
Rate of Taper	2.265	2.265
Taper Ratio	1.177	1.177
Dihedral Angle, degrees	0.200	0.2000
Incidence Angle, degrees	3.5000	3.500
Aerodynamic Twist, degrees	3.000	+3.00
Sweep Back Angles, degrees	3.500	+3.000
Leading Edge	45.00	45.00
Trailing Edge	-10.24	-10.24
0.25 Element Line	35.209	35.209
Chords:		
Root (Theo) B.P.0.0.	689.24	20.67720
Tip, (Theo) B.P. 46834	137.85	4.13550
MAC	474.81	14.24430
Fus. Sta. of .25 MAC	1136.89	34.10670
W.P. of .25 MAC	299.20	8.97840
183.13 B.L. of .25 MAC	182.13	5.46390
EXPOSED DATA		
Area (Theo) Ft^2	1752.29	1.57706
Span, (Theo) In. BP108 to 468.341	720.68	21.62040
Aspect Ratio	2.058	2.058
Taper Ratio	.2451	.2451
Chords		
Root BP108	562.40	16.8720
Tip 1.00 $\frac{b}{2}$	137.85	4.13550
MAC	393.03	11.79090
Fus. Sta. of .25 MAC	1185.31	35.55930
W.P. of .25 MAC	300.207	9.00621
B.L. of .25 MAC	143.76	4.31280
Airfoil Section (Rockwell Mod NASA) XXXX-64		
Root $\frac{b}{2}$ = .425	.10	.10
Tip $\frac{b}{2}$ = 1.00	.12	.12
Data for (1) of (2) Sides		
Leading Edge Cuff		
Planform Area Ft^2	120.33	.10830
Leading Edge Intersects Fus M. L. @ Sta	560.0	16.80
Leading Edge Intersects Wing @ Sta	1035.0	31.050

TABLE III. (CONTINUED)

MODEL COMPONENT: Elevon E-18

GENERAL DESCRIPTION: 2A Configuration Per W-87 Rockwell Lines VL 70-000093
Data for (1) of (2) Sides

Scale Model = .030

DRAWING NUMBER: VL 70-000093

DIMENSIONS:		FULL-SCALE	MODEL SCALE
Area ~	Ft^2	205.52	.18497
Span (equivalent) ~	IN.	353.34	10.60020
Inb'd equivalent chord		114.78	3.44340
Outb'd equivalent chord		55.00	1.6500
Ratio movable surface chord/ total surface chord			
At Inb'd equiv. chord		.208	.208
At Outb'd equiv. chord		.400	.400
Sweep Back Angles, degrees			
Leading Edge		0.00	0.00
Tailing Edge		-10.24	-10.24
Hingeline		0.00	0.00
Area Moment (Normal to hinge line) Product of Area Moment	Ft^3	1548.07	.04180

TABLE III. (CONTINUED)

MODEL COMPONENT: VERTICAL - V5 (Light Weight Orbiter Configuration)

GENERAL DESCRIPTION: Centerline Vertical Tail, Double Wedge Airfoil with Rounded Leading Edge

Scale Model = .030

DRAWING NUMBER: VL70-000095

DIMENSIONS:	FULL-SCALE	MODEL SCALE
TOTAL DATA		
Area (Theo) Ft^2	413.25	.37192
Planform		
Span (Theo) In	315.72	9.47160
Aspect Ratio	1.675	1.675
Rate of Taper	0.507	0.507
Taper Ratio	.404	.404
Sweep Back Angles, degrees		
Leading Edge	45.000	45.000
Trailing Edge	26.249	26.249
0.25 Element Line	41.130	41.130
Chords:		
Root (Theo) WP	268.50	8.05500
Tip (Theo) WP	108.47	3.25410
MAC	199.81	5.99430
Fus. Sta. of .25 MAC	1463.50	43.90500
W. P. of .25 MAC	635.522	19.06566
B. L. of .25 MAC	0.00	0.00
Airfoil Section		
Leading Wedge Angle Deg	10.000	10.000
Trailing Wedge Angle Deg	14.920	14.920
Leading Edge Radius IN.	2.00	.06
Void Area Ft^2	13.17	.01185
Blanketed Area Ft^2	12.67	.01140

TABLE III. (CONTINUED)

MODEL COMPONENT: R-5 Rudder

GENERAL DESCRIPTION: 2A Configuration per Rockwell Lines VL 70-000095

Scale Model = .030

DRAWING NUMBER: VL 70-000095

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Area ~ Ft^2	106.38	.09574
Span (equivalent) ~IN.	201.0	6.030
Inb'd equivalent chord	91.585	2.74755
Outb'd equivalent chord	50.833	1.52499
Ratio movable surface chord/ total surface chord		
At Inb'd equiv. chord	0.400	0.400
At Outb'd equiv. chord	0.400	0.400
Sweep Back Angles, degrees		
Leading Edge	34.83	34.83
Trailing Edge	26.25	26.25
Hingeline	34.83	34.83
Area Moment (Normal to hinge line) ~Ft^3 Product of Area and Mean Chord	526.13	.01421

TABLE III. (CONTINUED)

MODEL COMPONENT: OMS Pod -M3

GENERAL DESCRIPTION: 2A Light Weight Configuration per Rockwell Lines VL70-000094A

Scale Model = .030

DRAWING NUMBER: VL70-000094A

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length	346.0	10.380
Max. Width X_{-} = 1450.0	108.0	3.240
Max. Depth X_{o} = 1500.0	113.0	3.390
Fineness Ratio		
Area		
Max. Cross-Sectional		
Planform		
Wetted		
Base		

℄ of OMS Pod

WP = 463.9 IN. FS WP 400 + 63.9 = 463.9

BP = 80.0 IN. FS

Length 1214.0 to 1560.0 = 346.0 IN. FS

TABLE III. (CONTINUED)

MODEL COMPONENT: F4 Body Flap

GENERAL DESCRIPTION: 2A Configuration per Rockwell Lines VL70-000094A

Scale Model = .030

DRAWING NUMBER: VL70-000094A

DIMENSIONS:	FULL-SCALE	MODEL SCALE
Length	84.70	2.541
Max. Width	265.00	7.950
Max. Depth		
Fineness Ratio		
Area ~ Ft^2		
Max. Cross-Sectional		
Planform	142.64	.12838
Wetted		
Base Ft^2	38.65	.03478

TABLE III. (CONTINUED)

MODEL DIMENSIONAL DATA

MODEL COMPONENT : S3-Booster Solid Rocket Motor

GENERAL DESCRIPTION : 2A Configuration Per Rockwell Lines VL77-000012 & VL72-000061 "B"

Body of Revolution; Data for (1) of (2) Sides

Scale Model = .030

DRAWING NUMBER : VL 77-000012

DIMENSIONS :	FULL SCALE	MODEL SCALE
Length ~IN.	1732.0	51.96
Max Width (DIA) IN. BSRM Tank	142.0	4.260
Max Depth (DIA) Aft Skirt	259.0	7.77
Fineness Ratio L/D	6.687	6.687
Area ~ Ft^2		
Max. Cross-Sectional (Aft Skirt)	365.87	.32928
Planform		
Wetted		
Base		

Ref.

FS (Orbiter) = 0.00 = 747.99 IN. ET = 200.0 IN. BSRM

WP (BSRM) = WP 400(Orbiter) - 344.413 = 55.587 IN.

BP (Orbiter) = 0.00 = 243.0 IN. BSRM

TABLE III. (CONCLUDED)

MODEL COMPONENT: EXTERNAL TANK - T9

GENERAL DESCRIPTION: 2A Configuration

NOTE: T9 identical to T8 W/O retro pkg., nose w/30"R F.S.

DRAWING NUMBER NONE

DIMENSION:	FULL SCALE	MODEL SCALE
Length - IN.	1858	55.740
Max Width (Dia) - IN.	324.0	9.720
Max Depth		
Fineness Ratio L/D	5.73457	5.73457
Area - FT^2		
Max Cross-Sectional	572.56	0.51530
Planform		
Wetted		
Base		
Nose, Radius, IN.	30.0	

ORBITER STATION ~ X_o			RADIAL LOCATION θ ~ DEGREES																
FULL	MODEL	X_c/ℓ_o	0	20	40	55	70	90	105	110	120	135	142	150	157	162	165	169	172	180
200	6.00	0	20																	
210	6.30	.008	21					22												23
225	6.75	.019	24	25	26	27	28	29			30			31						32
245	7.35	.034	33	34	35	36	37	38			39			40						41
280	8.40	.060	42	43	44	45	46	47			48			49						50
380	11.40	.136	51	52	53	54	55	56			57			58						59
400	12.00	.151																	60	
410	12.30	.158													61					
430	12.90	.173	62	63	64	65	66	67			68			69		70		71		72
460	13.80	.196											73							
500	15.00	.226	74	75	76	77	78	79			80			81			82			83
560	16.80	.271	84		85		86	87			88			89			90			91
625	18.75	.320	92		93		94	95			96			97			98			99
725	21.75	.395	100		101		102	103			104			105			106			107
880	26.40	.512	108		109		110	111			112			113			114			115
980	29.40	.587	116		117															
1080	32.40	.662			118		119	120			121			122			123			124
1180	35.40	.738					125	126			127			128						129
1245	37.35	.787			130		131	132	133		134	135		136			137			138
1300	39.00	.828			139		140	141	142		143	144		145			146			
1375	41.25	.885			147		148	149	150		151	152		153			154			
1430	42.90	.926			155		156	157	158		159	160		161			162			
1480	44.40	.964	163				164	165	166		167	168		169			170			
1530[a]	45.90	1.001								171	173									
1530[b]	45.90	1.001								172	174									

a OMS POD, INSIDE

b OMS POD, OUTSIDE

a. Orbiter body

Table IV. Pressure Orifice Locations

ORBITER BASE

LOCATION	ORIFICE NUMBERS
ORBITER BASE (INTEGRATED)	1, 2, 3, 4
LEFT MPS NOZZLE BASE	5
UPPER MPS NOZZLE BASE	6
ACPS BASE AREA ON OMS POD	7
OMS NOZZLE BASE	8
OMS POD BASE	9
ORBITER BASE (STING MOUNT)	11, 12, 13, 14
ORBITER STING CAVITY	15, 16

BODY FLAP LWR SURFACE

ORB. STA. ~ X_o		θ ~ DEG	
FULL	MODEL	0	40
1580	47.40	175	176

MPS NOZZLE

X ~ IN. FWD BASE		θ ~ DEG					
FULL	MODEL	0	90	135	180	225	270
25	0.75	181	182	183	184	185	186
50	1.50	187	188	189	190	191	192
75	225		193	194	195	196	197

OMS NOZZLE

X ~ IN FWD BASE		θ ~ DEG		
FULL	MODEL	135	180	225
10	0.30	177	178	179
20	0.60		180	

VERTICAL TAIL

WATER PLANE ~ Z_o				X/C ~ THEORETICAL VERTICAL CHORD							
FULL	MODEL	η_v		0	.05	.15	.30	.52	.65	.775	.90
525	15.75	.079		400							
550	16.50	.158	L	410	411	412	413	414	415	416	
			R		511	512	513	514	515	516	
600	18.00	.316	L	420	421	422	423	424	425	426	427
			R		521	522	523	524	525	526	527
690	20.70	.60	L	430	431	432	433	434	435	436	437
			R		531	532	533	534	535	536	537
765	22.95	.84	L	440	441	442	443	444	445	446	447
			R		541	542	543	544	545	546	547
792	23.76	.925	L	450	451	452	453	454	455	456	457
			R		551	552	553	554	555	556	557

b. Orbiter Base, Body Flap Lower Surface, and Vertical Tail

Table IV. Continued.

ORBITER WING

ORBITER B.P. – Y				X/C – THEORETICAL WING CHORD																				
FULL	MODEL	η		-.49	-.35	-.25	-.15	-.033	0.0	.05	.15	.25	.40	.55	.60	.65	.70	.725	.75	.775	.80	.85	.90	.95
140	4.20	.299	U	200	201		202			203		204		205					206		207	208		209
			L		301		302			303		304		305					306		307	308		309
170	5.10	.364	U			210	211			212														
			L				311			312														
200	6.00	.427	U					220		221	222		223	224					225		226	227	228	229
			L							321	322		323	324					325		326	327	328	329
250	**7.50**	**.534**	U						230	231	232	233	234	235				236		237		238	239	240
			L							331	332	333	334	335				336		337		338	339	340
315	9.45	.673	U						250	251	252	253	254	255			256			257		258		259
			L							351	352	353	354	355			356			357		358		359
365	10.95	.780	U						260	261	262	263				264			265			266		267
			L							361	362	363				364			365			366		367
415	12.45	.887	U						270	271	272	273	274		275				276				277	
			L							371	372	373	374		376				376				377	

U - UPPER SURFACE L - LOWER SURFACE

η	X/C LOCAL WING CHORD
.299	0, .094, .229, .362, .497, .700, .834, .865, .900, .965
.364	0, .096, .246
.427	0, .081, .177, .402, .565, .760, .868, .857, .905, .953
.534	SAME AS THEORETICAL CHORD
.673	
.780	
.887	

c. Orbiter Wing

Table IV. Continued.

EXTERNAL TANK

TANK STA ~ XT			θ ~ DEG									
FULL	MODEL	XT/LT	0	30	60	90	120	135	150	165	180	270
316.	9.48	0	610									
317.7	9.53	.001	611			614					619	620
400	12.00	.045	621	622	623	624	625		627		629	
520	15.60	.110	631	632	633	634	635		637	638	639	
640	19.20	.174	641	642	643	644	645		647	648	649	
670	20.10	.191	651	652	653	654	655		657	658	659	
710	21.30	.212	661	662	663	664	665		667	668	669	
750	22.50	.234	671	672	673	674	675	676	677	678	679	
850	25.50	.287	681	682	683	684	685		687	688	689	
950	28.50	.341	691	692	693	694	695	696	697	698	699	
1050	31.50	.395	701	702	703	704	705		707	708	709	
1150	34.50	.449	711	712	713	714	715	716	717		719	
1250	37.50	.503	721	722	723	724	725		727	728	729	
1350	40.50	.557	731	732	733	734	735	736	737		739	
1500	45.00	.637	741	742	743	744	745		747	748	749	
1700	51.00	.745	751	752	753		755	756	757		759	
1900	57.00	.853	761	762	763		765	766	767	768		
2040	61.20	.929	771	772	773	774	775	776	777	778		
STING CAVITY			601									
BASE			602			603					604	

d. External Tank

Table IV. Continued.

LEFT SRM

SRM STATION ~ XS			θ ~ DEG							
FULL	MODEL	XS/ℓS	0	45	90	135	180	225	270	315
200	6.00	0	810							
260	7.80	.034	811	812	813	814	815	816	817	818
370	11.10	.097	821	822	823	824	825	826	827	828
400	12.00	.114	831	832	833	834	835	836	837	838
450	13.50	.142	841	842	843	844	845	846	847	848
550	16.50	.199	851	852	853	854	855	856	857	858
700	21.00	.284	861		863		865	866	867	868
850	25.50	.370	871		873		875		877	
1050	31.50	.484	881		883		885			
1250	37.50	.597	891		893		895			
1450	43.50	.711	901		903		905		907	
1650	49.50	.825	911		913		915		917	
1750	52.50	.882	921	922	923	924	925	926	927	928
1790	53.70	.904	931	932	933	934	935	936	937	938
1850	55.50	.939	941	942	943	944	945	946	947	948
1900	57.00	.967	951	952	953	954	955	956	957	958
NOZZLE BASE			801							
SKIRT BASE			802		803		804		805	

e. Left SRM

Table IV. Concluded.

Notes:

1. Positive directions of force cofficients, moment coefficients, and angles are indicated by arrow
2. For clarity, origins of wind and stability axes have been displaced from the center of gravity

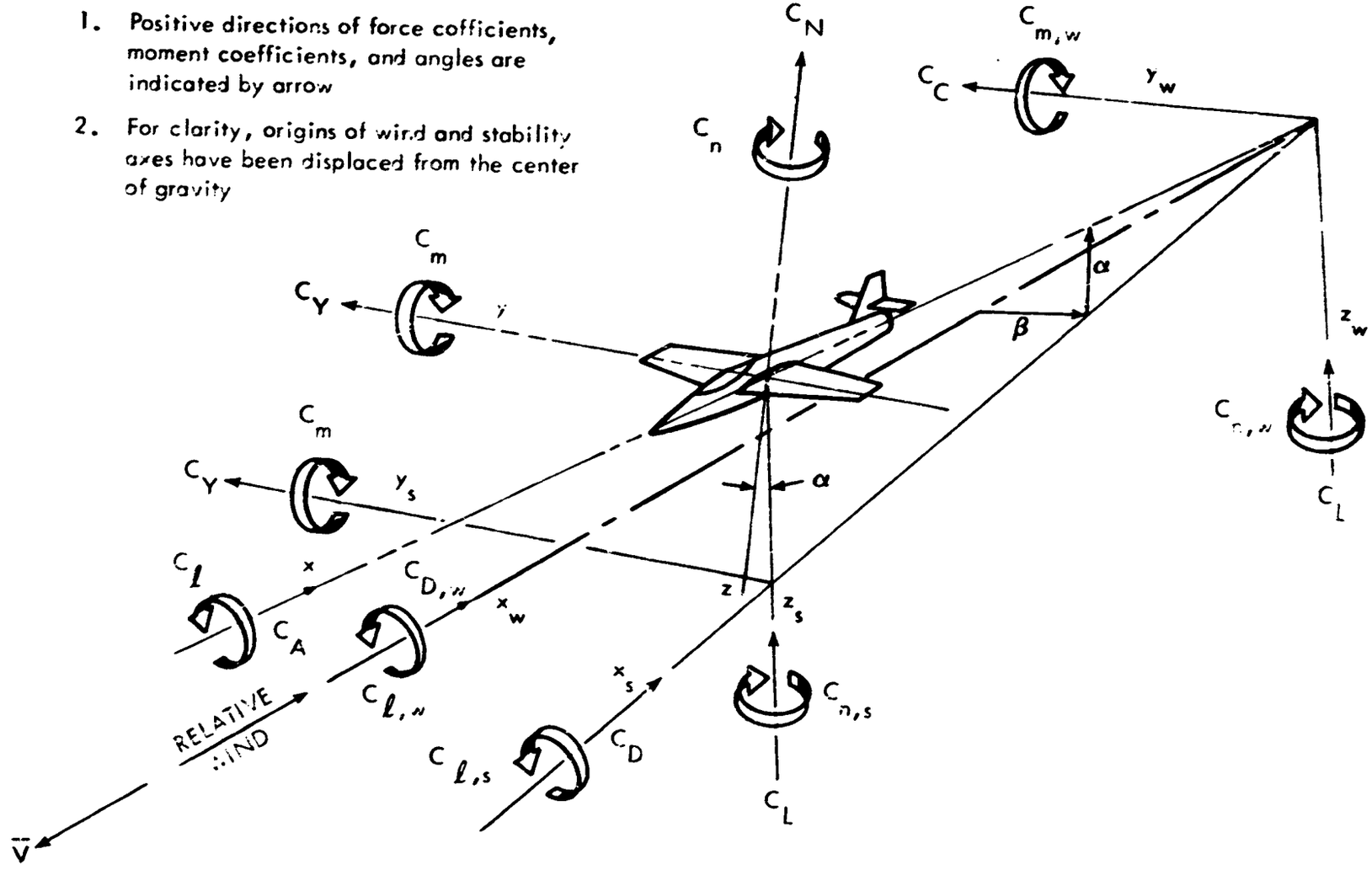
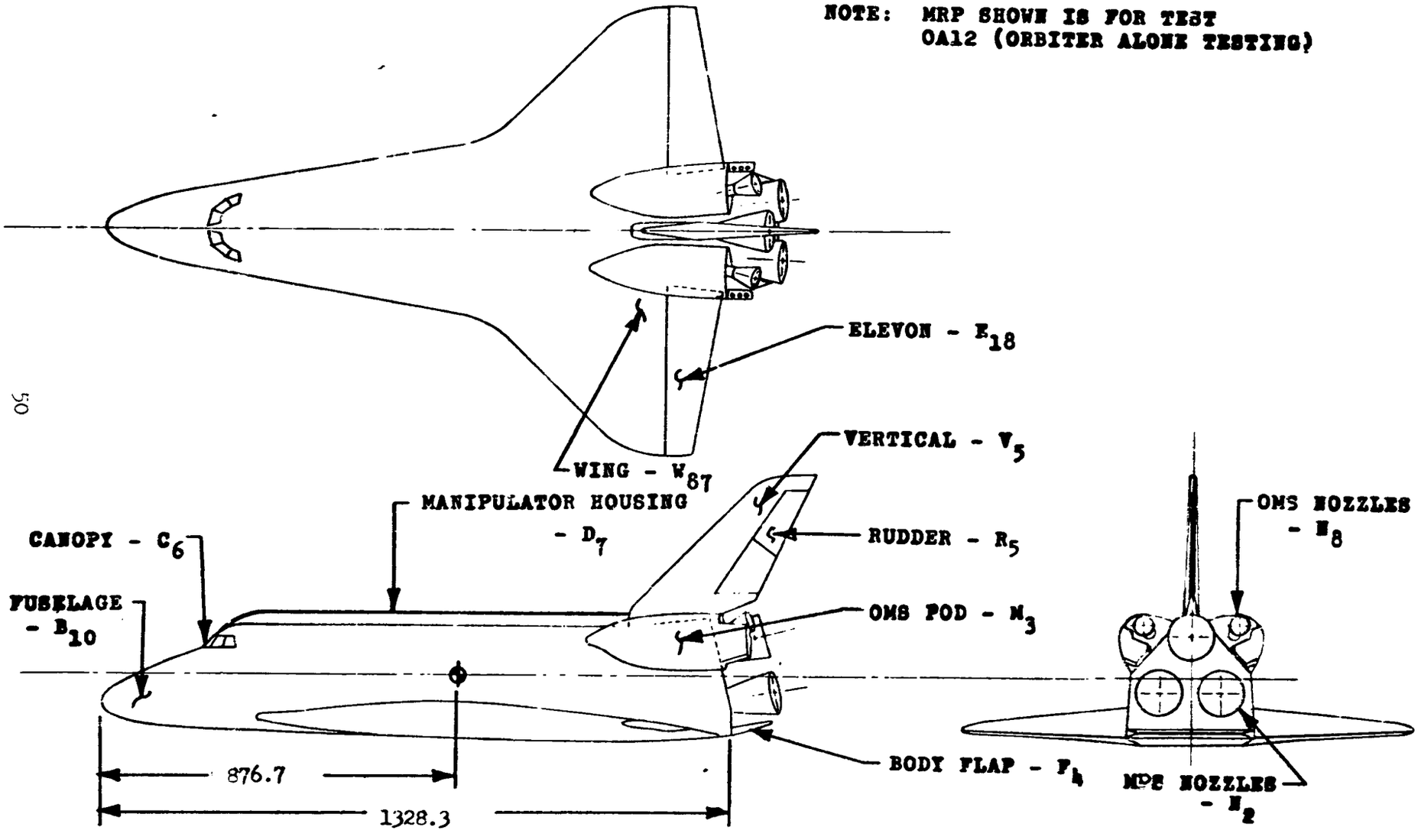
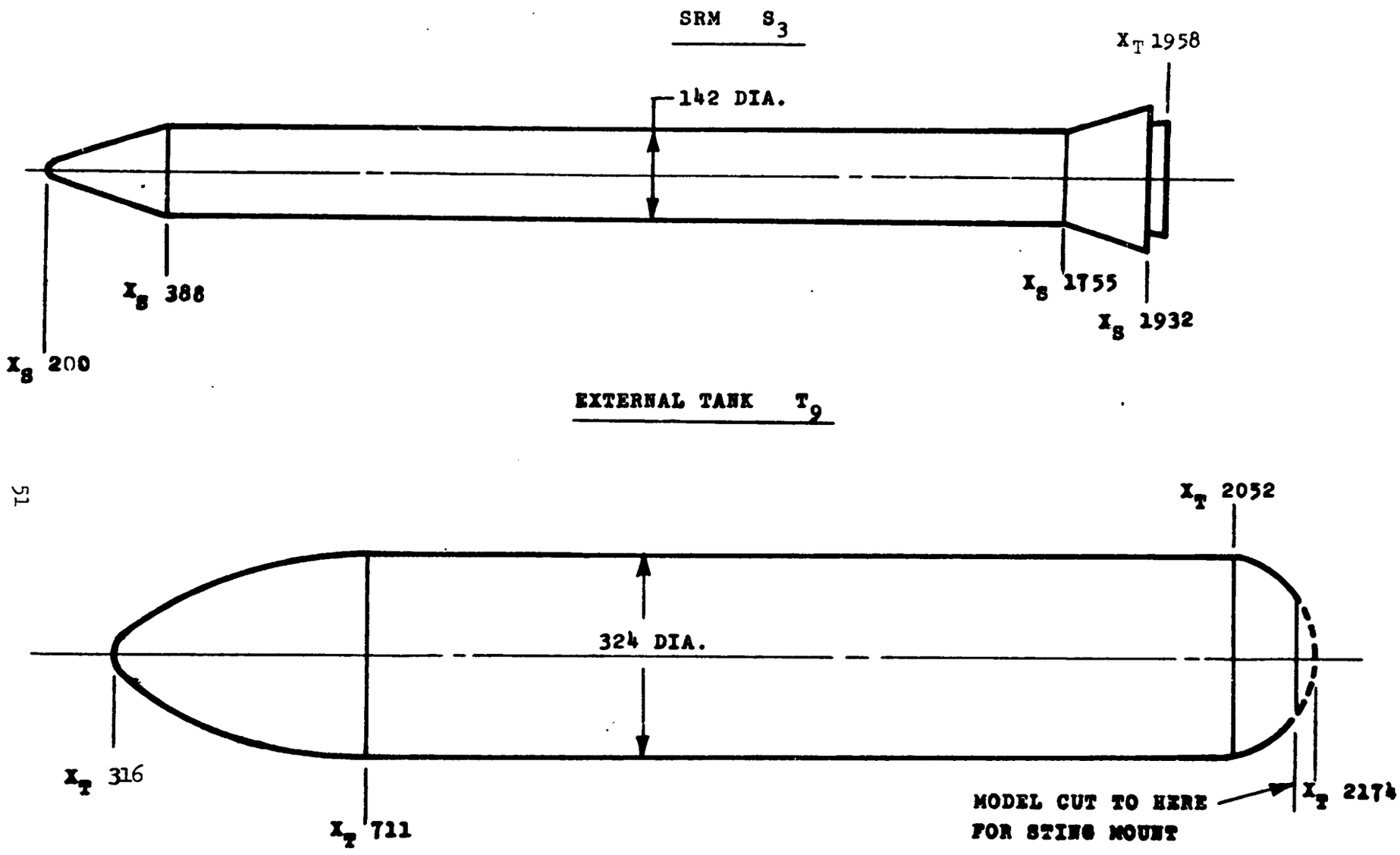


Figure 1. - Axis Systems.



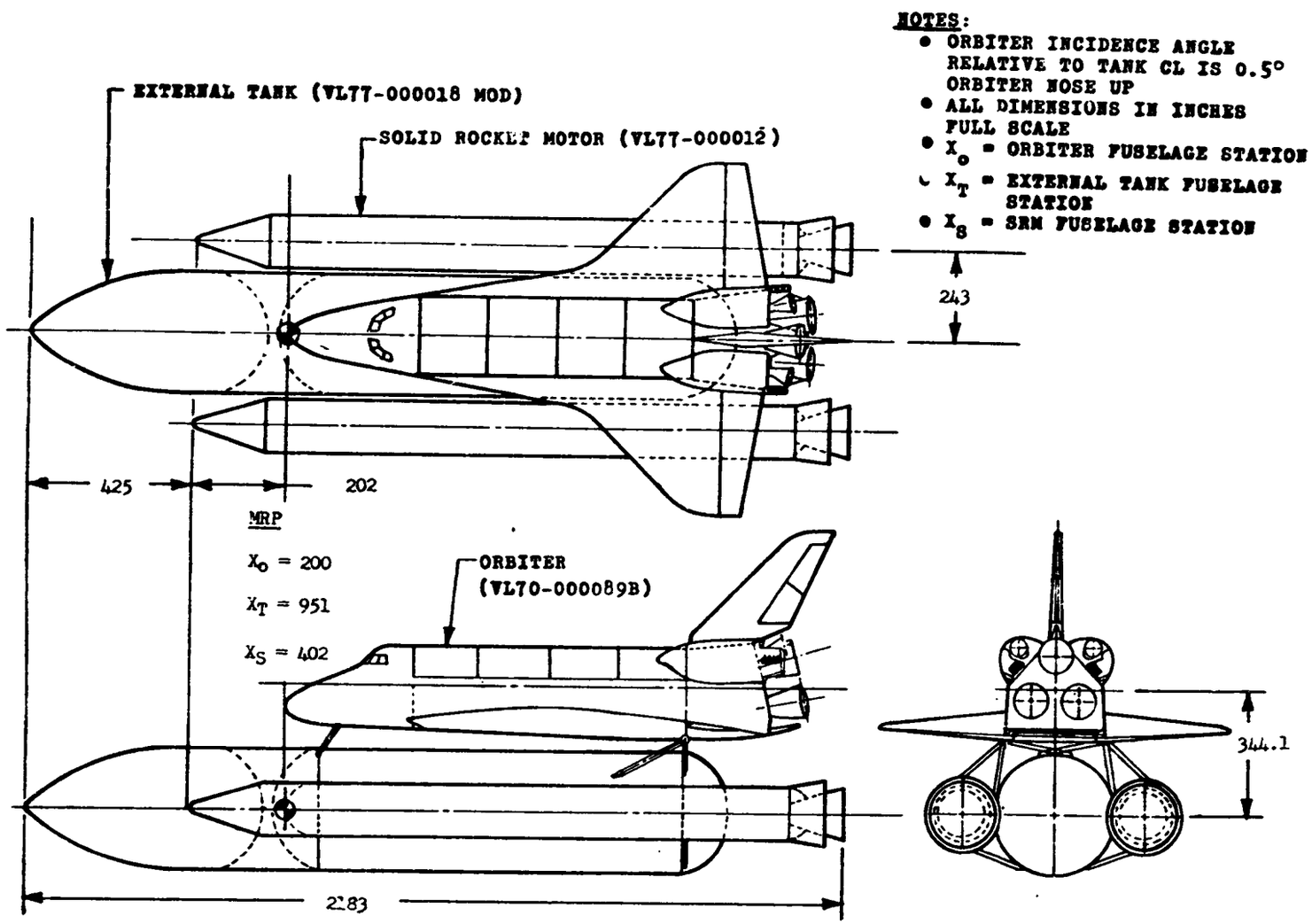
a. Orbiter, O_{24}

Figure 2. - Model Sketches.



b. SRM, S_3, and External Tank, T_9

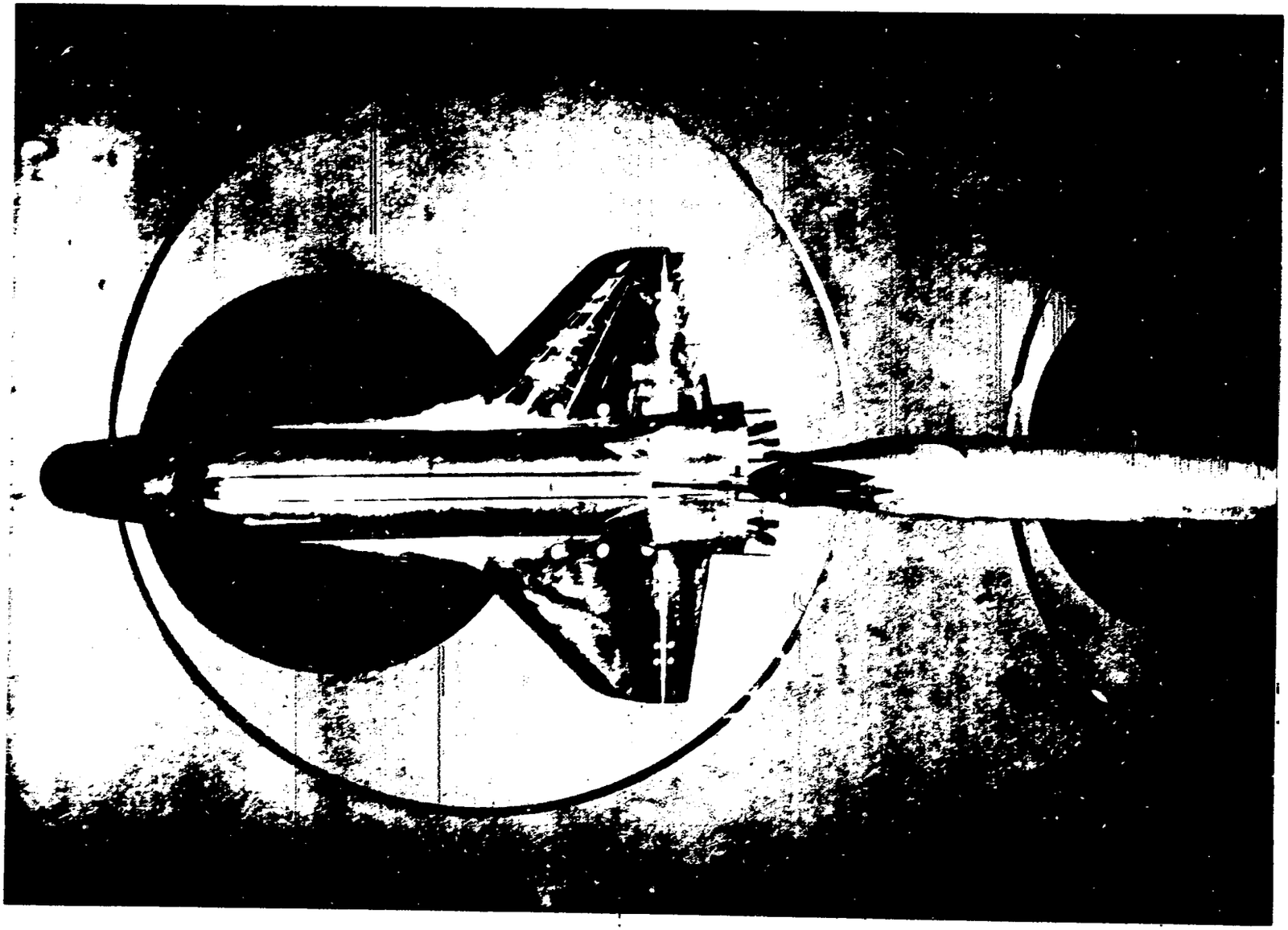
Figure 2. - Continued.



c. Integrated Vehicle

Figure 2. - Concluded.





c. Isolated Orbiter (Entry Configuration) Mounted in the ARC 6x7 Ft. Tunnel

Figure 3. - Concluded.

TABULATED PRESSURE DATA

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB01) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

BETAT = .000 ORBINC = .900
RUDDER = .000 ELEVON = .000
RUDFLR = .000

MACH (1) = 2.490 ALPHAT(1) = -8.100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7090	.9510	.3880	.0170	.0350	.2160			.0920		.0550	.1910	.1150	.0760	.0410
20.000			.4130	-.0110	.0270	.2250			.1110		.0700				
40.000			.4950	.0260	.0210	.2120			.1480		.1180	.0560	.0810	.0550	.0580
55.000			.5280	.0530	.0360	.1520			.1900		.2700				
70.000			.5490	.0530	.0560	.1270			.1530		.2550	.0940	.0680	.0300	.0500
90.000		1.1810	.5920	.1220	.0740	.1050			.1870		.1160	.0180	.0410	.0460	.0360
120.000			.6690	.2180	.2130	.1970			.2220		.0890	-.0510	-.0420	.0300	.0270
142.000										.0680					
150.000			.7170	.3040	.3320	.4140			.0840		.0210	-.0390	-.0190	-.0010	.0410
157.000								1.1420							
162.000									.9560						
165.000											-.0480	-.0470	-.0420	.0100	.0380
169.000									1.0010						
172.000							1.2640								
180.000	1.7090	1.3570	.6680	.3640	.3840	.5180			1.2850		-.0500	-.0130	-.0040	.0150	.0160

X/LB	.5873	.6826	.7580	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	.0330							-.1510		-.1030
40.000	.0410	.0440		.0360	-.0170	-.0850	-.1190			-.1520
70.000		.0280	-.0050	-.0060	.0350	.0180	.0000	.0140		
90.000		.0480	.0160	.0720	.0670	.0510	.0170	.0140		
105.000				.1190	.0720	.0600	.0070	.0060		
110.000									.0710	
120.000		.0460	.0480	.2660	.1780	-.0320	-.0050	.0430	.0410	
135.000				.6010	.4690	.0000	.0070	.0760		
150.000		.0360	.0500	.2560	.4590	.0760	.1360	.1520		
165.000		.0430		.2230	.4060	.2870	.2340	.1210		
180.000		.0520	.0480	.0500						

AMES 67-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU1)

MACH (1) = 2.498 ALPHAT(2) = -6.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6430	.9230	.3720	.0040	.0220	.2160			.0910		.0580	.1790	.1050	.0530	-.0480
20.000			.4030	-.0170	.0230	.2220			.1080		.0740				
40.000			.4800	.0190	.0160	.1620			.1470		.1150	.0510	.0710	.0350	.0410
55.000			.5110	.0200	.0270	.1570			.1610		.2470				
70.000			.5260	.0730	.0440	.1120			.1350		.2630	.0770	.0010	.0100	.0200
90.000		1.1350	.5620	.1120	.0620	.1010			.1550		.1060	.0330	.0260	-.0050	.0100
120.000			.6230	.2130	.1770	.1610			.1970		.0740	-.0600	-.0490	.0100	.0080
142.000										.0480					
150.000			.6580	.2660	.2860	.3490			.8140		.0010	-.0550	-.0420	-.0210	.0220
157.000								1.0590							
162.000									.8890						
165.000											-.0610	-.0650	-.0290	-.0130	.0230
169.000									.9260						
172.000							1.1600								
180.000	1.6430	1.2770	.6050	.3220	.3290	.4360			1.1990		-.0690	-.0360	-.0290	-.0090	.0010

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0070							-.1480		-.1030
40.000	.0110	.0200		.0250	-.0220	-.0720	-.1160			-.1460
70.000		-.0020	-.0300	-.0320	.0030	.0000	-.0140	-.0080		
90.000		.0160	-.0110	.0430	.0380	.0340	.0050	-.0020		
105.000				.0920	.0480	.0450	-.0010	-.0140		
110.000									.0770	
120.000		.0170	.0160	.2300	.1520	-.0320	-.0130	.0240	.0200	
135.000				.5230	.4210	-.0340	-.0060	.0520		
150.000		.0190	.0220	.2110	.3940	.0550	.1070	.1230		
165.000		.0220		.1870	.3470	.2550	.2060	.0840		
180.000		.0280	.0260	.0260						

MACH (1) = 2.498 ALPHAT(3) = -4.030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5780	.6890	.3510	-.0020	.0130	.2090			.0860		.0730	.1630	.1010	.0310	-.0460
20.000			.3840	-.0070	.0130	.2020			.1050		.0710				
40.000			.4610	.0130	.0110	.0930			.1510		.1070	.0460	.0580	.0170	.0170
55.000			.4970	.0480	.0170	.1410			.1110		.2160				
70.000			.4990	.0600	.0280	.0920			.1120		.2470	.0640	-.0100	-.0070	-.0080
90.000		1.0860	.5260	.0920	.0390	.0890			.1350		.0980	.0420	.0070	-.0190	-.0160
120.000			.5700	.1790	.1430	.1110			.1690		.0570	-.0730	-.0490	-.0110	-.0130

AMES 87-7U7 IA9 ORA + S3 + T9 ORBITER FUSELAGE (RBNBU1)

MACH (1) = 2.490 ALPHAT(3) = -4.030

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
142.000										.0280					
150.000			.5950	.2210	.2330	.2960			.7440		-.0230	-.0730	-.0650	-.0330	.0040
157.000								.9710							
162.000									.8170						
165.000											-.0790	-.0850	-.0520	-.0380	.0080
169.000									.8520						
172.000							1.0610								
180.000	1.5780	1.1930	.5390	.2700	.2760	.3620			1.1120		-.0890	-.0610	-.0540	-.0340	-.0070

X/LB	.5073	.6626	.7380	.7869	.8293	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0480							-.1350		-.1010
40.000	-.0080	-.0030		.0180	-.0220	-.0710	-.1210			-.1300
70.000		-.0360	-.0550	-.0540	-.0230	-.1270	-.0420	-.0280		
90.000		-.0190	-.0380	.0140	.0070	.0070	-.0150	-.0210		
105.000				.0600	.0280	.0190	-.0220	-.0300		
110.000									.0000	
120.000		-.0670	-.0100	.2030	.1310	-.0420	-.0280	-.0010	-.0020	
135.000				.4380	.3670	-.0410	-.0290	.5310		
150.000		-.0010	.0000	.1680	.3270	.0230	.0640	.0850		
165.000		.0030		.1550	.2900	.2120	.1590	.0470		
180.000		.0080	.0040	.0030						

MACH (1) = 2.490 ALPHAT(4) = -2.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.5190	.8640	.3480	.0010	.0180	.1800			.0940		.1310	.1480	.0810	.0110	-.0570
20.000			.3720	-.0190	.0180	.1660			.1110		.0740				
40.000			.4480	-.0190	.0150	.0330			.2290		.0940	.0390	.0430	-.0040	-.0440
55.000			.4710	.0010	.0160	.1090			.1030		.1900				
70.000			.4770	.0460	.0170	.0810			.0970		.2350	.0460	-.0330	-.0260	-.0290
90.000		1.0430	.4970	.0770	.0270	.0800			.1190		.0910	.0330	-.0220	-.0360	-.0370
120.000			.5270	.1520	.1150	.1070			.1520		.0350	-.0910	-.0440	-.0290	-.0340
142.000										.0490					
150.000			.5420	.1860	.1930	.2540			.6840		-.0520	-.1000	-.0800	-.0370	-.0160
157.000								.8970							
162.000									.7580						
165.000											-.1050	-.1090	-.0700	-.0540	-.0130
169.000									.7830						
172.000							.9710								

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU1)

MACH (1) = 2.490 ALPHAT(4) = -2.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.5190	1.1220	.4860	.2270	.2280	.3070			1.0270		-.1170	-.0890	-.0740	-.0530	-.0080
X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0080							-.1450		-.0910					
45.000	-.0160	-.0150		.0290	-.0180	-.0610	-.1440			-.1120					
75.000		-.0610	-.0730	-.0660	-.0390	-.0620	-.0850	-.0490							
90.000		-.0480	-.0610	-.0110	-.0140	-.0280	-.0500	-.0360							
105.000				.0320	.0110	-.0270	-.0530	-.0410							
115.000									-.0430						
120.000		-.0280	-.0320	.1710	.1100	-.0690	-.0500	-.0160	-.0160						
135.000				.3770	.3220	-.0700	-.0650	.0190							
150.000		-.0170	-.0180	.1430	.2720	-.0190	.0150	.0560							
165.000		-.0130		.1360	.2430	.1450	.1030	.0180							
180.000		-.0110	-.0140	-.0090											

MACH (1) = 2.490 ALPHAT(5) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4580	.8480	.3700	.0650	.0500	.1390			.1170		.1700	.1490	.0870	-.0030	-.0730
20.000			.3940	.0100	.0310	.0910			.1280		.1250				
40.000			.4430	.0310	.0340	.0160			.2330		.0880	.0510	.0530	-.0200	-.0650
55.000			.4610	.0450	.0350	.0940			.1270		.1640				
75.000			.4640	.0430	.0150	.0740			.0910		.2180	.0490	-.0340	-.0420	-.0480
90.000		1.0000	.4730	.0650	.0210	.0720			.0870		.1220	.0390	-.0230	-.0520	-.0540
120.000			.4870	.1260	.0950	.0910			.1510		.0890	-.0790	-.0390	-.0470	-.0530
142.000										.0000					
150.000			.4910	.1530	.1610	.2100			.0220		-.0560	-.0920	-.0920	-.0440	-.0320
157.000								.0250							
162.000									.0980						
165.000											-.1030	-.1110	-.0950	-.0560	-.0250
169.000									.0190						
172.000							.0870								
180.000	1.4580	1.0530	.4320	.1890	.1890	.2570			.0540		-.1160	-.0930	-.0880	-.0640	-.0150
X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.1010							-.1320		-.0850					
45.000	-.0130	-.0140		.0340	-.0090	-.0480	-.1270			-.1130					

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB01)

MACH (1) = 2.498 ALPHAT(5) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0640	-.0830	-.0790	-.0470	-.0560	-.0770	-.0640		
90.000		-.0630	-.0700	-.0230	-.0260	-.0320	-.0540	-.0490		
105.000				.0090	-.0020	-.0110	-.0530	-.0560		
110.000									-.0170	
120.000		-.0430	-.0490	.1360	.1090	-.0420	-.0580	-.0270	-.0290	
135.000				.3660	.2790	-.0420	-.0630	.0000		
150.000		-.0320	-.0350	.1150	.2270	-.0300	.0050	.0370		
165.000		-.0260		.1050	.2080	.1260	.0870	-.0040		
180.000		-.0230	-.0290	-.0280						

MACH (1) = 2.498 ALPHAT(6) = 1.930

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.3990	.9150	.4030	.0050	.0660	.0610			.1490		.1530	.1160	.0660	-.0140	-.0650
20.000			.4320	.0020	.0760	.0630			.1690		.1320				
40.000			.4890	.0430	.0530	-.0030			.2330		.0740	.0380	.0470	-.0320	-.0700
55.000			.4890	.0620	.0380	.0740			.1240		.1410				
70.000			.4650	.0560	.0180	.0710			.0850		.1660	.0310	-.0420	-.0560	-....
90.000		.9670	.4530	.0610	.0170	.0710			.0980		.1580	.0180	-.0340	-.0640	-.0730
120.000			.4510	.1050	.0720	.0910			.1580		.0350	-.0740	-.0430	-.0650	-.0710
142.000										-.0160					
150.000			.4480	.1230	.1310	.1740			.0690		-.0640	-.1030	-.1000	-.0570	-.0460
157.000								.7620							
162.000									.0360						
165.000											-.1120	-.1190	-.0980	-.0560	-.0490
169.000									.0530						
172.000							.0130								
180.000	1.3990	.9040	.3880	.1520	.1550	.2120			.0690		-.1260	-.1070	-.1020	-.0670	-.0280

X/LB	.5873	.6826	.7380	.7869	.8285	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1100							-.1020		-.0750
40.000	-.0490	-.0210		.0380	-.0020	-.0340	-.1130			-.0660
70.000		-.0920	-.0940	-.0860	-.0520	-.0620	-.0820	-.0710		
90.000		-.0760	-.0750	-.0250	-.0260	-.0370	-.0590	-.0580		
105.000				.0050	.0030	-.0200	-.0590	-.0650		
110.000									-.0640	
120.000		-.0610	-.0840	.1050	.0920	-.0180	-.0570	-.0370	-.0440	
135.000				.2950	.2490	-.0680	-.0660	-.0420		
150.000		-.0500	-.0510	.0820	.1910	-.0380	-.0060	.0260		

AMES 07-7U7 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU1)

MACH (1) = 2.498 ALPHAT(6) = 1.935

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6826	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
185.000		-.0450		.0690	.1820	.1970	.0680	-.0190		
180.000		-.0460	-.0450	-.0420						

MACH (1) = 2.498 ALPHAT(7) = 3.940

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3480	.9310	.3970	.0310	.0990	-.0050			.1820		.1570	.0770	.0630	-.0340	-.0990
2.000			.4290	.0270	.1220	-.0220			.1990		.1140				
4.000			.4930	.0270	.0910	-.0090			.2050		.0670	.0250	.0230	-.0430	-.0950
55.000			.4900	.0250	.0550	.0650			.1280		.1150				
7.000			.4580	.0480	.0170	.0790			.1080		.1530	.0480	-.0570	-.0720	-.0820
9.000		.9300	.4360	.0460	.0120	.0660			.0810		.1550	-.0020	-.0530	-.0780	-.0940
12.000			.4080	.0450	.0530	.0790			.1530		.0340	-.0500	-.0640	-.0830	-.0990
142.000										-.0290					
150.000			.3990	.0920	.0980	.1390			.5190		-.0810	-.1160	-.1030	-.0680	-.0510
157.000								.7500							
162.000									.5740						
165.000											-.1230	-.1290	-.1070	-.0610	-.0500
169.000									.5890						
172.000							.7690								
180.000	1.3480	.9260	.3410	.1160	.1210	.1730			.7910		-.1390	-.1220	-.1140	-.0710	-.0480

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1150							-.0860		-.0690
4.000	.0090	-.0150		.0340	.0050	-.0170	-.0910			-.0840
7.000		-.1010	-.1030	-.0930	-.0560	-.0550	-.0770	-.0830		
9.000		-.0660	-.0790	-.0220	-.0240	-.0350	-.0570	-.0690		
105.000				.0030	.0040	-.0360	-.0520	-.0730		
111.000									-.0760	
120.000		-.0740	-.0650	.0750	.0820	-.0340	-.0470	-.0500	-.0520	
135.000				.2150	.2130	-.0340	-.0540	-.0160		
150.000		-.0640	-.0640	.0650	.1580	-.0350	-.0050	.0110		
165.000		-.0620		.0440	.1570	.0980	.0600	-.0300		
180.000		-.0570	-.0590	-.0550						

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

MES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU1)

MACH (1) = 2.498 ALPHAT(8) = 5.950

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3780	.9460	.4620	.1130	.0400	-.0300			.2210		.1590	.0840	.0520	-.0460	-.1080
20.000			.4830	.1240	.0710	-.0340			.1980		.1440				
40.000			.5180	.1060	.1530	-.0010			.1650		.0510	.0160	.0070	-.0600	-.0190
55.000			.5160	.0850	.0850	.0470			.1290		.0080				
70.000			.4810	.0610	.0250	.0640			.1230		.1230	-.0050	-.0700	-.0830	-.0930
90.000		.9450	.4300	.0450	.0140	.0680			.0990		.1460	-.0060	-.0670	-.0920	-.1040
120.000			.3800	.0660	.0400	.0710			.1470		.0460	-.0550	-.0800	-.0980	-.1020
142.000										-.0350					
150.000			.3580	.0680	.0730	.1130			.4720		-.0880	-.1150	-.1030	-.0780	-.0730
157.000								.6370							
162.000									.5010						
165.000											-.1310	-.1310	-.1020	-.0630	-.0620
169.000									.5290						
172.000							.7050								
180.000	1.3780	.8540	.2980	.0900	.0680	.1390			.7180		-.1460	-.1310	-.1180	-.0610	-.0510

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0180							-.0600		-.0570
40.000	.0110	.0200		.0510	.0120	-.0020	-.0850			-.0740
70.000		-.1010	-.1050	-.1010	-.0690	-.0650	-.0830	-.0990		
90.000		-.0880	-.0830	-.0260	-.0250	-.0450	-.0600	-.0730		
105.000				.0070	.0040	-.0440	-.0570	-.0770		
110.000									-.0220	
120.000		-.0800	-.0610	.0640	.0920	-.0420	-.0500	-.0570	-.0600	
135.000				.1200	.1580	-.0440	-.0590	-.0260		
150.000		-.0780	-.0710	.0550	.1090	-.0300	-.0490	.0040		
165.000		-.0730		.0330	.1270	.0750	.0400	-.0420		
180.000		-.0680	-.0700	-.0640						

MACH (1) = 2.498 ALPHAT(9) = 8.010

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3870	.9950	.5310	.1520	-.0290	.0090			.2090		.1040	.0700	.0230	-.0610	-.1110
20.000			.5410	.1640	-.0050	.0010			.1690		.0880				
40.000			.5600	.1490	.1030	.0330			.1350		.0300	-.0060	-.0110	-.0720	-.0420
55.000			.5430	.1100	.1120	.0550			.1240		.0660				
70.000			.4970	.0700	.0370	.0550			.1270		.0960	-.0220	-.0820	-.0970	-.0990
90.000		.9520	.4320	.0460	.0160	.0690			.1060		.1360	-.0240	-.0820	-.1040	-.1140
120.000			.3440	.0450	.0280	.0690			.1080		.0580	-.0640	-.0920	-.1080	-.1190

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C PAGE 8

AME3 87-707 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNB01)

MACH (1) = 2.490 ALPHAT(9) = 8.010

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0198	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
142.500										-.0430					
150.000			.3060	.0430	.0470	.0910			.4270		-.0950	-.1120	-.1060	-.0950	-.0910
157.500								.5910							
162.000									.4590						
165.000											-.1390	-.1310	-.0980	-.0790	-.0750
169.500									.4640						
172.000							.6950								
180.000	1.3870	.7880	.2480	.0580	.0620	.1080			.6330		-.1550	-.1350	-.1210	-.0640	-.0650

X/LB	.9079	.8626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0010							-.0680		-.0440
40.000	.0125	.0880		.0690	.0250	-.0060	-.0690			-.0720
75.000		-.1650	-.1140	-.1090	-.0870	-.0760	-.0970	-.0980		
90.000		-.0910	-.0940	-.0490	-.0280	-.0540	-.0700	-.0740		
105.000				.0040	.0080	-.0550	-.0660	-.0810		
115.000									-.0840	
125.000		-.0820	-.0610	.0060	.1190	-.0480	-.0620	-.0660	-.0790	
135.000				.0820	.1120	-.0490	-.0775	-.0810		
150.000		-.0850	-.0740	.0440	.0650	-.0820	-.0210	-.0680		
165.000		-.0810		.0280	.0990	.0480	.0130	-.0520		
180.000		-.0820	-.0770	-.0660						

MACH (2) = 2.999 ALPHAT(1) = -8.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0198	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	.0000	.0000	.2625			.1180		.0380	.1440	.1380	.1270	.0440
25.000			.4470	.5060	.3400	.2280			.1470		.0420				
40.000			.5290	.5470	-.0030	.1240			.1710		.0890	.0770	.0860	.0420	.0790
55.000			.5570	.0890	.0580	.0890			.0990		.0190				
75.000			.5060	.1570	.0780	.0810			.0850		.0260	.0360	.0360	.0440	.0340
90.000		.0000	.6390	.1530	.0870	.0940			.1370		.0580	-.0270	-.0300	.0340	.0340
120.000			.7140	.2650	.2230	.1990			.2330		.0140	-.0230	-.0220	-.0350	.0250
142.500										.1210					
150.000			.7620	.3220	.3310	.3020			.9320		.0430	-.0120	-.0150	.0000	.0000
157.500								1.2160							
162.000									1.1110						
165.000											-.0090	-.0230	-.0140	.0090	.0110
169.500									1.1460						
.00							1.3060								

AMES 67-7U7 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBN6U1)

MACH (2) = 2.999 ALPHAT(1) = -8.U7U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.U0U0	.U075	.U1U8	.U339	.U6U2	.1355	.15U6	.1581	.1732	.1958	.2259	.2711	.32U0	.3953	.512U
PHI															
18U.UU0	.UUUU	.UUUU	.7U6U	.378U	.38UU	.461U			1.483U		-.U24U	-.U48U	.U12U	.UU8U	.U17U
X/LB	.5873	.6626	.738U	.7869	.8283	.8348	.9262	.9639	1.UU15	1.U392					
PHI															
.UUU	.U28U							-.1U1U		-.1U4U					
4U.UU0	.U54U	.U27U		.U79U	.U24U	-.U38U	-.U53U			-.123U					
7U.UU0		.U1UU	-.U15U	-.U13U	.U18U	.U26U	.U39U	.U12U							
9U.UU0		.U33U	.U6BU	.U45U	.U55U	.U56U	.U33U	.U27U							
1U5.UU0				.1U6U	.U62U	.U59U	.U36U	.U21U							
11U.UU0									.U22U						
12U.UU0		.U41U	.U35U	.223U	.182U	-.U05U	.UUUU	.U41U	.U45U						
135.UU0				.524U	.449U	.U14U	.U11U	.U38U							
15U.UU0		.U41U	.U34U	.199U	.389U	.U55U	.U89U	.123U							
165.UU0		.U27U		.149U	.314U	.254U	.219U	.133U							
18U.UU0		.U14U	.U33U	.U41U											

MACH (2) = 2.999 ALPHAT(2) = -6.1UU

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1956	.2259	.2711	.3200	.3953	.5120
PHI															
.UUU	.0000	.0000	.0000	-.0U9U	-.0U8U	.238U			.112U		.U39U	.1100	.134U	.1090	.025U
2U.UU0			.422U	-.U34U	-.U08U	.195U			.139U		.U33U				
4U.UU0			.503U	.U34U	-.U08U	.1U9U			.149U		.1U9U	.U69U	.U61U	.U29U	.U18U
55.UU0			.518U	.U67U	.U45U	.U74U			.U85U		.156U				
7U.UU0			.553U	.U91U	.U59U	.U64U			.U73U		.119U	.U24U	.U3UU	.U27U	.U3UU
9U.UU0		.U00U	.599U	.133U	.U79U	.U78U			.1U8U		.U51U	-.U33U	-.U32U	.U22U	.U17U
12U.UU0			.654U	.221U	.188U	.145U			.199U		.U65U	-.U39U	-.U38U	-.U4UU	.U12U
142.UU0										.U96U					
15U.UU0			.689U	.274U	.281U	.328U			.846U		.U22U	-.U28U	-.U26U	-.U21U	-.U13U
157.UU0								1.114U							
162.UU0									1.U19U						
165.UU0											-.U18U	-.U4UU	-.U19U	-.U08U	-.U15U
169.UU0									1.U43U						
172.UU0							1.185U								
18U.UU0	.UUUU	.UUUU	.635U	.317U	.325U	.391U			1.361U		-.U4UU	-.U17U	-.U.9U	-.U.5U	-.U.9U
X/LB	.5873	.6626	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392					
PHI															
.UUU	-.U12U							-.119U		-.1U6U					
4U.UU0	.U31U	.U05U		.U66U	.U13U	-.U4UU	-.U66U			-.127U					

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB01)

MACH (2) = 2.999 ALPHAT(2) = -6.150

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0150	-.0400	-.0390	-.0120	-.0100	-.0240	-.0690		
90.000		.0040	-.0200	.0080	.0210	.0290	.0690	.0670		
105.000				.0750	.0360	.0300	.0690	.0620		
110.000									.0070	
120.000		.0150	.0090	.1980	.1540	-.0260	-.0260	.0190	.0270	
135.000				.4440	.4040	-.0030	-.0060	.0270		
150.000		.0150	.0170	.1660	.3370	.0370	.0660	.1060		
165.000		.0150		.1440	.2780	.2180	.1890	.0980		
180.000		-.0010	.0170	.0250						

MACH (3) = 2.999 ALPHAT(3) = -4.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0070	.0000	.2100			.1110		.0460	.1030	.1330	.1960	.0690
20.000			.4010	.0620	-.0040	.1610			.1330		.0380				
40.000			.4800	.0400	-.0040	.1010			.1300		.1480	.0620	.0580	.0210	.0440
55.000			.5060	.0750	.0340	.0670			.1070		.1300				
70.000			.5290	.0920	.0470	.0600			.0650		.1130	.0260	.0300	.0690	.0080
90.000		.0000	.5670	.1230	.0610	.0710			.0810		.0520	-.0300	-.0250	.0160	-.0010
120.000			.6070	.2050	.1580	.1390			.1770		.0710	-.0420	-.0480	-.0450	.0020
142.000										.0790					
150.000			.5280	.2440	.2370	.2780			.7650		.0680	-.0380	-.0440	-.0310	-.0200
157.000								1.0190							
162.000									.9280						
165.000											-.0300	-.0500	-.0370	-.0230	-.0270
169.000									.9470						
172.000							1.0030								
180.000	.0000	.0000	.5790	.2840	.2720	.3330			1.2410		-.0520	-.0310	-.0250	-.0210	-.0260

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0310							-.1040		-.1010
40.000	.0100	-.0050		.0590	.0060	-.0540	-.0710			-.1240
70.000		-.0330	-.0520	-.0530	-.0330	-.0350	-.0440	-.0260		
90.000		-.0180	-.0400	-.0250	-.0100	.0040	-.0080	-.0080		
105.000				.0450	.0180	.0040	-.0090	-.0130		
110.000									-.0100	
120.000		-.0050	-.0100	.2020	.1300	-.0380	-.0450	.0010	.0160	
135.000				.3410	.3560	-.0210	-.0230	.0140		
150.000		-.0040	-.0020	.1330	.2810	.0130	.0420	.0890		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB01)

MACH (2) = 2.999 ALPHAT(3) = -4.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
185.000		-.0030		.1370	.2350	.1730	.1490	.0640		
180.000		-.0020	.0040	.0120						

MACH (2) = 2.999 ALPHAT(4) = -2.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3216	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0110	-.0120	.1540			.0990		.0520	.1290	.1240	.0840	-.0010
25.000			.3840	-.0040	-.0050	.0530			.1110		.0410				
40.000			.4390	.0320	-.0040	.0930			.0810		.1360	.0580	.0430	.0180	-.0130
55.000			.4800	.0640	.0300	.0600			.0690		.1220				
70.000			.5010	.0630	.0370	.0580			.0620		.0990	.0360	.0210	-.0010	-.0100
90.000		.0000	.5290	.1050	.0510	.0610			.0530		.0520	-.0260	-.0120	-.0010	-.0190
120.000			.5520	.1740	.1320	.1190			.1550		.0540	-.0490	-.0580	-.0390	-.0170
142.000										.0560					
150.000			.5640	.2020	.1980	.2340			.6820		-.0110	-.0470	-.0570	-.0480	-.0240
157.000								.9230							
162.000									.8380						
165.000											-.0420	-.0590	-.0510	-.0390	-.0340
169.000									.8540						
172.000							.9870								
180.000	.0000	.0000	.5100	.2350	.2290	.2790			1.1230		-.0620	-.0470	-.0430	-.0360	-.0380

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0440							-.1220		-.0970
40.000	-.0380	-.0190		.0490	-.0030	-.0560	-.0780			-.1220
70.000		-.0520	-.0630	-.0700	-.0500	-.0540	-.0680	-.0420		
90.000		-.0380	-.0590	-.0490	-.0410	-.0210	-.0290	-.0190		
105.000				.0190	-.0110	-.0220	-.0360	-.0210		
110.000									-.0240	
120.000		-.0190	-.0280	.1930	.1050	-.0570	-.0620	-.0210	-.0480	
135.000				.2880	.2930	-.0430	-.0490	-.0050		
150.000		-.0170	-.0170	.1040	.2190	-.0120	.0140	.0510		
165.000		-.0150		.1140	.1860	.1250	.0980	.0320		
180.000		-.0150	-.0110	-.0040						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU1)

MACH (2) = 2.999 ALPHAT(5) = -.010

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0150	-.0050	.0060			.0840		.0780	.1210	.1150	.0580	-.0140
2.000			.3650	-.0210	-.0640	.0000			.1130		.0590				
4.000			.4350	.0250	-.0040	.0650			.0460		.1280	.0480	.0400	.0140	-.0260
55.000			.4450	.0480	.0210	.0470			.0920		.1280				
7.000			.4580	.0480	.0250	.0530			.0580		.0910	.0590	.0110	-.0150	-.0290
9.000		.0000	.4880	.0830	.0350	.0530			.0350		.0560	-.0170	.0010	-.0180	-.0360
120.000			.5000	.1340	.1040	.1030			.1490		.0480	-.0560	-.0670	-.0350	-.0350
142.000										.0380					
150.000			.4990	.1630	.1620	.1900			.6130		-.0240	-.0590	-.0690	-.1610	-.0310
157.000								.8370							
162.000									.7530						
165.000											-.0560	-.0710	-.0650	-.0540	-.0360
169.000									.7640						
172.000							.9090								
180.000	.0000	.0000	.4460	.1890	.1850	.2300			1.0210		-.0750	-.0610	-.0580	-.0500	-.0510

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392
PHI										
.000	-.0550							-.1260		-.0920
40.000	-.0510	-.0270		.0440	-.0440	-.0520	-.0790			-.1210
70.000		-.0670	-.0790	-.0810	-.0590	-.0690	-.0790	-.0570		
90.000		-.0540	-.0710	-.0530	-.0520	-.0460	-.0480	-.0350		
105.000				-.0120	-.0340	-.0430	-.0460	-.0360		
110.000									.0040	
120.000		-.0380	-.0470	.1420	.0850	-.0640	-.0740	-.0330	-.0210	
135.000				.3140	.2440	-.0580	-.0740	-.0230		
150.000		-.0310	-.0300	.0750	.1750	-.0300	-.0070	.0290		
155.000		-.0270		.0810	.1720	.0960	.0630	.0210		
180.000		-.0210	-.0220	-.0160						

MACH (2) = 2.999 ALPHAT(6) = 1.930

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0070	.0090	-.0280			.0910		.0890	.1240	.1060	.0490	-.0240
2.000			.3900	.0230	-.0060	-.0220			.1030		.1100				
4.000			.4180	.0240	-.0040	.0500			.0290		.1260	.0460	.0250	.0180	-.0340
55.000			.4360	.0420	.0350	.0560			.0830		.1230				
7.000			.4420	.0410	.0220	.0540			.0590		.0850	.0620	-.0020	-.0270	-.0430
9.000		.0000	.4540	.0650	.0280	.0530			.0310		.0620	-.0120	.0000	-.0280	-.0490
120.000			.4560	.1110	.0850	.0870			.1420		.0310	-.0500	-.0700	-.0360	-.0500

AMES 87-7U7 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU1)

MACH (2) = 2.999 ALPHAT(6) = 1.93U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.023U					
150.000			.442U	.127U	.130U	.156U			.544U		-.037U	-.067U	-.078U	-.066U	-.042U
157.000								.771U							
162.000									.664U						
165.000											-.063U	-.081U	-.074U	-.065U	-.042U
169.000									.681U						
172.000							.856U								
180.000	.0000	.0000	.389U	.148U	.152U	.192U			.913U		-.082U	-.071U	-.070U	-.062U	-.053U

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.052U							-.119U		-.068U
40.000	-.080U	-.017U		.045U	.003U	-.033U	-.071U			-.122U
70.000		-.082U	-.096U	-.090U	-.068U	-.070U	-.072U	-.065U		
90.000		-.088U	-.083U	-.068U	-.054U	-.052U	-.057U	-.047U		
105.000				-.029U	-.038U	-.042U	-.047U	-.046U		
110.000									-.038U	
120.000		-.055U	-.063U	.074U	.062U	-.068U	-.072U	-.024U	-.026U	
135.000				.266U	.258U	-.065U	-.070U	-.033U		
150.000		-.042U	-.042U	.048U	.145U	-.044U	-.022U	.011U		
165.000		-.037U		.045U	.147U	.079U	.051U	-.006U		
180.000		-.030U	-.034U	-.028U						

MACH (2) = 2.999 ALPHAT(7) = 3.96U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0190	.0310	-.0340			.058U		.142U	.106U	.088U	.033U	-.036U
25.000			.426U	.033U	.028U	-.032U			.055U		.126U				
40.000			.476U	.076U	.023U	.005U			.016U		.112U	.033U	.016U	.012U	-.045U
55.000			.467U	.078U	.041U	.063U			.051U		.121U				
70.000			.441U	.068U	.024U	.053U			.057U		.083U	.045U	-.018U	-.038U	-.056U
90.000		.000U	.435U	.068U	.024U	.051U			.026U		.061U	-.007U	-.019U	-.041U	-.061U
120.000			.415U	.099U	.067U	.074U			.116U		.020U	-.068U	-.070U	-.043U	-.067U
142.000										.019U					
150.000			.398U	.106U	.102U	.129U			.482U		-.053U	-.088U	-.086U	-.068U	-.051U
157.000								.692U							
162.000									.588U						
165.000											-.088U	-.093U	-.082U	-.071U	-.048U
169.000									.605U						
172.000							.756U								

AMES 87-7\7 IA9 ORA + S3 + T9 ORBITER FUSELAGE (RBNB\1)

MACH (2) = 2.999 ALPHAT(7) = 3.96

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	.0000	.0000	.3520	.1240	.1180	.1520			.8190		-.0950	-.0880	-.0790	-.0710	-.0490

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0730							-.1230		-.0780
40.000	-.0680	.0010		.0420	.0050	-.0210	-.0690			-.1190
70.000		-.0690	-.1020	-.0970	-.0750	-.0830	-.0990	-.0720		
90.000		-.0610	-.0980	-.0660	-.0580	-.0630	-.0690	-.0540		
105.000				-.0390	-.0440	-.0470	-.0640	-.0560		
110.000									-.0080	
120.000		-.0690	-.0730	.0250	.0340	-.0740	-.0620	-.0340	-.0330	
135.000				.1770	.1660	-.0750	-.0860	-.0350		
150.000		-.0540	-.0550	.0350	.1240	-.0630	-.0410	-.0250		
165.000		-.0480		.0120	.1180	.0560	.0220	-.0170		
180.000		-.0420	-.0460	-.0430						

MACH (2) = 2.999 ALPHAT(8) = 5.99

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0350	.0470	-.0420			.0490		.0490	.0420	.0300	.0210	-.0090
20.000			.4610	.0540	.0390	-.0410			.0620		.0130				
40.000			.5160	.0610	.0420	-.0280			.0250		.0870	.0180	.0140	-.0110	-.0420
55.000			.5250	.0820	.0490	.0380			.0310		.0180				
70.000			.4630	.0820	.0260	.0490			.0520		.0970	.0320	-.0280	-.0520	-.0680
90.000		.0000	.4140	.0640	.0260	.0520			.0360		.0550	.0090	-.0270	-.0540	-.0760
120.000			.3760	.0760	.0490	.0570			.0930		.0150	-.0650	-.0580	-.0560	-.0810
142.000										-.0060					
150.000			.3510	.0790	.0750	.1020			.0290		-.0580	-.0850	-.0890	-.0720	-.0490
157.000								.0180							
162.000									.0520						
165.000											-.0850	-.0950	-.0990	-.0740	-.0540
169.000									.0360						
172.000							.0690								
180.000	.0000	.0000	.2990	.0930	.0880	.1170			.0730		-.1020	-.0940	-.0890	-.0760	-.0550

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0810							-.1040		-.0590
40.000	-.0820	-.1040		.0370	.0060	-.0040	-.0610			-.1140

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB01)

MACH (2) = 2.999 ALPHAT(8) = 5.990

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0970	-.1070	-.1020	-.0780	-.0730	-.0810	-.0740		
90.000		-.0960	-.0970	-.0650	-.0550	-.0560	-.0610	-.0580		
105.000				-.0440	-.0420	-.0370	-.0530	-.0550		
110.000									-.0440	
120.000		-.0860	-.0820	.0090	.0290	-.0380	-.0490	-.0480	-.0410	
135.000				.0880	.1130	-.0730	-.0720	-.0300		
150.000		-.0640	-.0670	.0210	.0920	-.0590	-.0460	-.0220		
165.000		-.0580		-.0200	.0780	.0420	.0120	-.0270		
180.000		-.0520	-.0570	-.0530						

MACH (2) = 2.999 ALPHAT(9) = 8.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0480	.0140	-.0430			.1150		.1610	.0660	.0690	-.0160	-.0630
20.000			.4960	.0750	.0300	-.0440			.1180		.1180				
40.000			.5460	.1000	.0590	-.0350			.0860		.0500	.0230	.0020	-.0290	-.0560
55.000			.5410	.1010	.0600	.0250			.0440		.0920				
70.000			.4830	.1000	.0240	.0450			.0470		.0480	.0140	-.0410	-.0650	-.0800
90.000		.0000	.4170	.0580	.0240	.0510			.0470		.0560	.0460	-.0390	-.0750	-.0870
120.000			.3380	.0620	.0410	.0560			.0570		.0140	-.0640	-.0650	-.0750	-.0930
142.000										-.0110					
150.000			.3070	.0570	.0550	.0790			.0790		-.0610	-.0860	-.0950	-.0780	-.0740
157.000								.5490							
162.000									.0540						
165.000											-.0890	-.0960	-.0960	-.0730	-.0640
169.000									.0700						
172.000							.6000								
180.000	.0000	.0000	.2550	.0680	.0660	.0930			.0690		-.1030	-.0970	-.0970	-.0810	-.0570

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0840							-.0840		-.0390
40.000	-.0390	.0010		.0360	.0050	-.0090	-.0550			-.0950
70.000		-.1010	-.1090	-.1020	-.0810	-.0640	-.0720	-.0770		
90.000		-.0980	-.1090	-.0660	-.0470	-.0420	-.0530	-.0590		
105.000				-.0370	-.0330	-.0240	-.0430	-.0560		
110.000									-.0430	
120.000		-.0900	-.0860	.0110	.0550	-.0230	-.0390	-.0450	-.0460	
135.000				.0470	.0740	-.0620	-.0620	-.0330		
150.000		-.0780	-.0800	.0080	.0450	-.0490	-.0340	-.0250		

AMES 87-757 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU1)

MACH (2) = 2.990 ALPHAT(9) = 8.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.9875	.8626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
185.000		-.0700		-.0480	.0470	.0330	.0400	-.0360		
180.000		-.0650	-.0790	-.0650						

MACH (3) = 3.502 ALPHAT(1) = -8.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1596	.1581	.1732	.1958	.2259	.2711	.3246	.3953	.5122
PHI															
.000	.0000	.0000	.0000	.0390	.0310	.1910			.1450		.0550	.0670	.1250	.0970	.0610
2.000			.4640	.0240	.0240	.1			.1660		.0570				
4.000			.5630	.0740	.0210	.			.1210		.1040	.1120	.0830	.0630	.0660
55.000			.5780	.1170	.0740	.			.1930		.1230				
7.000			.5520	.1480	.0940	.0000			.0810		.1120	.0240	.0020	.0510	.0560
9.000		.0000	.7130	.1970	.1190	.1140			.1170		.0860	-.0030	-.0180	-.0030	.0410
12.000			.7860	.3050	.2410	.2230			.2680		.1260	.0020	-.0160	-.0170	.0050
142.000										.1560					
150.000			.8270	.3620	.3430	.3840			.9720		.1420	.0060	.0020	-.0020	.0020
157.000								1.2840							
162.000									1.2220						
165.000											.0120	-.0050	.0110	.0090	.0120
169.000									1.2380						
172.000							1.3620								
180.000	.0000	.0000	.7680	.4080	.3890	.4570			1.6030		-.0070	.0160	.0160	.0210	.0130

X/LB	.9875	.8626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0340									
40.000	.0530	.0410			.0410	-.0110	-.0330	-.0690		-.0870
7.000		.0150	-.0190	-.0160	.0060	.0270	.0160	.0190		-.0870
9.000		.0320	.0060	.0160	.0520	.0560	.0460	.0360		
105.000				.0160	.0790	.0570	.0340	.0270		
111.000									.0330	
120.000		.0390	.0320	.0870	.0830	.0210	.0060	.0120	.0380	
135.000				.0470	.0430	.0210	.0220	.0390		
150.000		.0230	.0290	.0590	.0340	.0440	.0560	.0210		
165.000		.0130		.0110	.0250	.0220	.0180	.0240		
180.000		.0080	.0120	.0210						

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU1)

MACH (3) = 3.902 ALPHAT(2) = -6.080

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0250	.0150	.1260			.1350		.0490	.0610	.1290	.0820	.0450
20.000			.4330	.0490	.0080	.0730			.1520		.0530				
40.000			.5270	.0610	.0050	.0590			.1150		.0810	.1070	.0780	.0520	.0450
55.000			.5490	.1020	.0580	.0570			.0810		.1060				
70.000			.6090	.1270	.0770	.0710			.0620		.0930	.0210	.0030	.0390	.0360
90.000		.0000	.6580	.1690	.1060	.0990			.0680		.0710	-.0090	-.0220	-.0430	.0240
120.000			.7130	.2610	.2040	.1940			.2220		.1050	-.0070	-.0220	-.0310	.0000
142.000										.1250					
150.000			.7380	.3070	.2900	.3280			.8760		.0470	-.0050	-.0200	-.0120	-.0170
157.000								1.2000							
162.000									1.1180						
165.000											.0140	-.0210	-.0150	-.0040	-.0090
169.000									1.1310						
172.000							1.2900								
180.000	.0000	.0000	.6950	.3460	.3310	.3880			1.4690		-.0190	-.0050	.0070	-.0050	-.0010
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0170							-.0720		-.0680					
40.000	.0260	.0220		.0700	.0290	-.0150	-.0190			-.0930					
70.000		-.0050	-.0340	-.0330	-.0140	-.0030	-.0130	-.0070							
90.000		.0090	-.0130	-.0070	.0200	.0370	.0210	.0060							
105.000				.0630	.0580	.0390	.0120	.0040							
110.000									.0080						
120.000		.0190	.0130	.1980	.1430	.0090	-.0050	.0010	.0130						
135.000				.3320	.3980	.0190	.0100	.0170							
150.000		.0100	.0140	.1360	.2840	.0410	.0480	.0700							
165.000		.0040		.1210	.2210	.1840	.1610	.0620							
180.000		-.0080	.0180	.0160											

MACH (3) = 3.902 ALPHAT(3) = -4.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0150	.0040	.0950			.1230		.0380	.0380	.1260	.0610	.0260
20.000			.4040	.0010	-.0050	.0740			.1390		.0400				
40.000			.4940	.0490	-.0050	.0700			.0980		.0710	.0920	.0640	.0400	.0240
55.000			.5130	.0910	.0490	.0510			.0690		.0750				
70.000			.5680	.1090	.0650	.0580			.0560		.0770	.0200	-.0040	.0230	.0160
90.000		.0000	.6110	.1430	.0820	.0820			.0580		.0610	-.0190	-.0310	-.0420	.0080
120.000			.6450	.2230	.1720	.1640			.1900		.0680	-.0220	-.0370	-.0390	-.0110

AMES 87-707 IA9 OEA + 93 + T9 ORBITER FUSELAGE (BSHBU1)

MACH (3) = 3.962 ALPHA(3) = -4.07

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5125
RHI															
142.0000										.1050					
150.0000			.0599	.2580	.2410	.2750			.7890		.0290	-.0170	-.0340	-.0330	-.0340
157.0000								1.1120							
162.0000									1.0020						
165.0000											-.0140	-.0270	-.0360	-.0250	-.0360
169.0000									1.0290						
172.0000							1.1850								
180.0000	.0000	.0000	.0020	.2940	.2750	.3280			1.3410		-.0290	-.0180	-.0220	-.0170	-.0250

X/LB	.5873	.6529	.7581	.7869	.8283	.8848	.9262	.9539	1.0015	1.0392
RHI										
.0000	.0000							-.0730		-.0650
4.0000	-.0210	.0140		.0550	.0080	-.0170	-.0320			-.0570
7.0000		-.0260	-.0520	-.0430	-.0370	-.0150	-.0340	-.0280		
9.0000		-.0130	-.0510	-.0340	-.0110	.0020	.0040	-.0240		
155.0000				.0430	.0270	.0110	-.0230	-.0210		
161.0000									-.0130	
172.0000		-.0210	-.0140	.2220	.1420	.0110	-.0220	-.0150	-.0230	
155.0000				.2650	.3320	.0040	-.0220	.0040		
159.0000		-.0240	-.0110	.1170	.2120	.0220	.0330	.0550		
165.0000		-.0120		.0170	.1760	.0510	.0290	.0520		
180.0000		-.0220	-.0070	.0050						

MACH (3) = 3.962 ALPHA(4) = -2.02

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5125
RHI															
.0000	.0000	.0000	.0000	.0540	.0130	.0370			.0830		.0670	.0360	.0170	.0130	.0020
2.0000			.0450	.0460	.0120	.0330			.0650		.0520				
4.0000			.0490	.0370	.0390	.0450			.0470		.0210	.0070	.0040	.0270	.0070
55.0000			.0210	.0470	.0420	.0450			.0710		.0570				
7.0000			.0350	.0210	.0350	.0170			.0690		.0310	.0190	-.0110	.0180	.0040
9.0000		.0000	.0670	.0270	.0170	.0490			.0530		.0660	-.0140	-.0280	.0000	-.0020
12.0000			.0580	.0280	.0140	.0490			.0720		.0710	-.0270	-.0390	-.0350	-.0190
142.0000										.0690					
150.0000			.0590	.0220	.0270	.0230			.0710		.0130	-.0240	-.0370	-.0340	-.0330
157.0000								.0960							
162.0000									.0930						
165.0000											-.0160	-.0390	-.0320	-.0310	-.0320
169.0000									.0910						
7 .0000							1.0420								

AMES 87-767 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB01)

MACH (3) = 3.962 ALPHAT(4) = -2.02

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	.0000	.0000	.5380	.2470	.2330	.2730			1.2460		-.0360	-.0280	-.0220	-.0280	-.0290

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0140							-.0710		-.0760
40.000	-.0150	-.0270		.0500	-.0020	-.0180	-.0280			-.0910
70.000		-.0360	-.0560	-.0530	-.0440	-.0300	-.0420	-.0360		
90.000		-.0260	-.0450	-.0410	-.0260	-.0180	-.0080	-.0140		
105.000				.0210	.0020	-.0140	-.0190	-.0180		
110.000									-.0160	
120.000		-.0150	-.0230	.1870	.1220	-.0070	-.0320	-.0240	-.0110	
135.000				.2410	.2740	-.0060	-.0210	-.0040		
150.000		-.0140	-.0170	.0800	.1710	.0080	.0230	.0440		
165.000		-.0160		.0880	.1550	.1220	.1000	.0390		
180.000		-.0220	-.0140	-.0010						

MACH (3) = 3.962 ALPHA1(5) = -.03

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0510	.0040	.0180			.0530		.0700	.0770	.0690	.0650	.0480
20.000			.4540	.1430	.0230	.0120			.0320		.0580				
40.000			.5030	.1870	.0330	.0530			.0250		.0620	.0760	.0460	.0090	-.0050
55.000			.5080	.1870	.0680	.0560			.0660		.0480				
70.000			.5070	.1880	.0570	.0590			.0560		.0670	.0050	-.0020	.0050	-.0120
90.000		.0000	.5240	.1130	.0600	.0720			.0410		.0590	-.0170	-.0310	-.0010	-.0210
120.000			.5280	.1630	.1230	.1280			.0540		.0550	-.0340	-.0480	-.0430	-.0240
142.000										.0660					
150.000			.5210	.1820	.1680	.2000			.0630		-.0020	-.0360	-.0480	-.0490	-.0410
157.000								.0710							
162.000									.0800						
165.000											-.0290	-.0460	-.0480	-.0450	-.0430
169.000									.0060						
172.000							.9110								
180.000	.0000	.0000	.4890	.2050	.1900	.2280			1.0740		-.0450	-.0400	-.0410	-.0390	-.0410

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0270							-.0680		-.0890
40.000	-.0290	-.0480		.0360	-.0050	-.0300	-.0440			-.0910

AMES 87-707 IA9 OEA + S2 + T9 ORBITER FUSELAGE (PBNB:1)

MACH (3) = 3.962 ALPHAT(5) = -.03

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7389	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
7.000		-.0540	-.0690	-.0670	-.0550	-.0400	-.0520	-.0430		
9.000		-.0430	-.0680	-.0590	-.0410	-.0270	-.0260	-.0250		
115.000				-.0070	-.0230	-.0210	-.0290	-.0310		
117.000									-.0280	
120.000		-.0310	-.0380	.1540	.1870	-.0210	-.0410	-.0330	-.0250	
135.000				.2310	.2120	-.0200	-.0340	-.0190		
150.000		-.0260	-.0360	.1480	.1340	-.0090	.0030	.0220		
165.000		-.0250		.1490	.1270	.0970	.0780	.0150		
180.000		-.0310	-.0220	-.0130						

MACH (3) = 3.962 ALPHAT(6) = 1.95

SECTION (2)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1596	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.1490	.1620	-.0090			.0140		.0590	.0810	.0560	.0680	.0410
2.000			.4580	.0590	.0210	-.0240			-.0030		.0550				
4.000			.5120	.0930	.0300	.0250			-.0050		.0910	.0610	.0280	-.0220	-.0180
55.000			.5120	.0930	.0520	.0450			.0540		.0360				
7.000			.4810	.0930	.0490	.0480			.0480		.0470	-.0010	.0260	-.0130	-.0310
9.000		.0000	.4830	.0970	.0460	.0590			.0380		.0490	-.0250	-.0370	-.0110	-.0380
120.000			.4740	.1350	.0940	.1040			.0970		.0350	-.0430	-.0560	-.0520	-.0550
142.000										.0430					
150.000			.4680	.1470	.0330	.1620			.0340		-.0210	-.0590	-.0610	-.0580	-.0480
157.000								.7640							
162.000									.0990						
165.000											-.0430	-.0590	-.0630	-.0580	-.0530
169.000									.7190						
172.000							.7980								
180.000	.0000	.0000	.4990	.1630	.1530	.1820			.0460		-.0590	-.0590	-.0550	-.0540	-.0540

X/LB	.5873	.6626	.7389	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0480							-.0750		-.0650
40.000	-.0390	-.0580		.1260	-.0150	-.0230	-.0390			-.0940
7.000		-.0680	-.0840	-.0780	-.0670	-.0550	-.0510	-.0540		
9.000		-.0570	-.0750	-.0620	-.0530	-.0420	-.0420	-.0480		
115.000				-.0290	-.0370	-.0360	-.0370	-.0420		
117.000									-.0480	
120.000		-.0510	-.0560	.0890	.0880	-.0370	-.0590	-.0420	-.0320	
135.000				.2170	.1690	-.0330	-.0440	-.0350		
150.000		-.0480	-.0410	.0290	.0110	-.0230	-.0240	.0030		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB01)

MACH (3) = 3.502 ALPHAT(6) = 1.95

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
169.000		-.0390		.0150	.1440	.0750	.0490	-.0010		
180.000		-.0350	-.0340	-.0260						

MACH (3) = 3.502 ALPHAT(7) = 3.960

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0510	.0970	-.0280			-.0150		.0790	.0970	.0520	.0590	-.0090
2.000			.4830	.0540	.0060	-.0350			-.0280		.0840				
4.000			.5380	.0990	.0350	-.0680			-.0230		.1230	.0470	.0110	-.0050	-.0300
55.000			.5330	.0990	.0650	.0460			.0410		.0350				
7.000			.4700	.0990	.0490	.0420			.0490		.0330	-.0060	.0050	-.0270	-.0470
9.000		.0000	.4480	.0850	.0430	.0520			.0370		.0470	-.0230	-.0360	-.0270	-.0510
120.000			.4230	.2190	.0750	.0850			.0880		.0250	-.0460	-.0630	-.0550	-.0540
142.000										.0270					
150.000			.4040	.1150	.1050	.1290			.4620		-.0290	-.0580	-.0760	-.0690	-.0520
157.000								.6650							
162.000									.6420						
165.000											-.0510	-.0680	-.0760	-.0660	-.0550
169.000									.6210						
172.000							.6910								
180.000	.0000	.0000	.3560	.1290	.1210	.1440			.8330		-.0670	-.0670	-.0690	-.0620	-.0620

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0510							-.0750		-.0640
40.000	-.0450	-.0590		.0170	-.0210	-.0240	-.0390			-.0930
70.000		-.0780	-.0680	-.0870	-.0770	-.0610	-.0690	-.0610		
90.000		-.0740	-.0830	-.0730	-.0670	-.0520	-.0480	-.0480		
105.000				-.0440	-.0520	-.0460	-.0440	-.0470		
110.000									-.0140	
120.000		-.0670	-.0690	.0250	.0270	-.0430	-.0540	-.0430	-.0350	
135.000				.1410	.1250	-.0430	-.0550	-.0440		
150.000		-.0540	-.0550	.0140	.0810	-.0390	-.0310	-.0120		
165.000		-.0490		-.0150	.0650	.0520	.0300	-.0110		
180.000		-.0440	-.0460	-.0410						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB01)

MACH (3) = 3.502 ALPHAT(8) = 5.97

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0680	-.0408	-.0440			-.0250		.1230	.1090	.0490	.0320	-.0240
2.000			.4980	.0770	-.0690	-.0480			-.0390		.0890				
4.000			.5480	.1110	.0380	-.0380			-.0280		.1060	.0160	.0090	.0110	-.0310
55.000			.5470	.1120	.0610	.0230			.0180		.0410				
7.000			.4070	.0890	.0360	.0290			.0370		.0280	.0070	-.0110	-.0410	-.0570
9.000		.0000	.4190	.0840	.0390	.0410			.0320		.0330	-.0250	-.0260	-.0410	-.0610
12.000			.3740	.0850	.0550	.0660			.0520		.0110	-.0520	-.0680	-.0570	-.0690
142.000										.0110					
150.000			.3500	.0860	.0760	.0990			.4060		-.0440	-.0650	-.0790	-.0740	-.0590
157.000								.5810							
162.000									.5240						
165.000											-.0620	-.0760	-.0790	-.0730	-.0590
169.000									.5390						
172.000							.5970								
180.000	.0000	.0000	.3010	.0940	.0880	.1110			.7310		-.0780	-.0770	-.0770	-.0700	-.0630

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0580							-.0720		-.0530
4.000	-.0550	-.0410		.0160	-.0140	-.0230	-.0400			-.0990
7.000		-.0850	-.0980	-.0980	-.0790	-.0620	-.0490	-.0640		
9.000		-.0820	-.0910	-.0750	-.0650	-.0500	-.0500	-.0540		
105.000				-.0550	-.0560	-.0400	-.0410	-.0510		
111.000									-.0270	
120.000		-.0770	-.0790	.0110	.0170	-.0680	-.0450	-.0420	-.0420	
135.000				.0540	.0780	-.0480	-.0610	-.0560		
150.000		-.0630	-.0630	.0030	.0590	-.0450	-.0380	-.0330		
165.000		-.0580		-.0330	.0380	.0320	.0110	-.0250		
180.000		-.0540	-.0560	-.0660						

MACH (3) = 3.502 ALPHAT(9) = 8.010

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0510	-.0240	-.0340			.0250		.1480	.0630	.0530	.0110	-.0340
2.000			.5190	.0780	-.0110	-.0370			.0440		.1020				
4.000			.5600	.1250	.0320	-.0350			.0440		.0530	.0150	-.0020	-.0080	-.0370
55.000			.5580	.1240	.0700	.0140			.0240		.0620				
7.000			.4860	.0970	.0370	.0270			.0370		.0310	.0140	-.0250	-.0460	-.0620
9.000		.0000	.4090	.0750	.0370	.0390			.0420		.0170	-.0250	-.0250	-.0510	-.0690
12.000			.3380	.0740	.0490	.0590			.0540		.0060	-.0550	-.0660	-.0560	-.0750

AMES 87-7:7 IA9 C&A + 33 + T9 ORBITER FUSELAGE (RSNBU:)

MACH (3) = 5.952 ALPHAT(9) = 8.010

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1353	.1506	.1581	.1732	.1958	.2259	.2711	.3216	.3953	.5125
PHI															
142.000										.1021					
150.000			.3072	.1671	.1624	.1781			.3481		-.1048	-.1714	-.1781	-.1711	-.1611
157.000								.5171							
162.000									.4316						
165.000											-.1671	-.1815	-.1761	-.1721	-.1571
169.000									.4631						
172.000							.5181								
180.000	.0000	.0000	.2615	.0731	.1681	.1861			.5411		-.1911	-.1841	-.1781	-.1711	-.1591

X/LB	.5873	.6828	.7781	.7869	.8283	.8948	.9262	.9539	1.0015	1.0392
PHI										
.000	-.0581							-.0691		-.0371
4.000	-.0571	-.0241		.0121	-.0031	-.0111	-.0491			-.0791
7.000		-.0841	-.0941	-.0871	-.0771	-.0561	-.0461	-.0601		
9.000		-.0841	-.0921	-.0741	-.0571	-.0411	-.0451	-.0481		
115.000				-.0491	-.0431	-.0251	-.0341	-.0441		
111.000									-.0301	
120.000		-.0811	-.0801	.0011	.0241	-.0241	-.0361	-.0381	-.0311	
135.000				.0231	.0491	-.0341	-.0611	-.0391		
150.000		-.0691	-.0711	-.0671	.0261	-.0481	-.0611	-.0331		
165.000		-.0611		-.0451	.0281	.0181	-.0431	-.0291		
180.000		-.0561	-.0601	-.0511						

AMES 87-7D7 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB02) (10 MAY 73)

REFERENCE DATA

SREF = 2.421D SQ.FT. XMRP = 28.53DD INCHES
LREF = 39.849D INCHES YMRP = .DDDD INCHES
BREF = 39.849D INCHES ZMRP = .DDDD INCHES
SCALE = .03DD SCALE

PARAMETRIC DATA

ALPHAT = -8.DDD CRBINC = .5DD
RUDDER = .DDD ELEVON = .DDD
RUDFLR = .DDD

MACH (1) = 2.498 BETAT (1) = -8.4DD

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.DDDD	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3214	.3953	.5121
PHI															
.DDD	1.6975	.9749	.4030	.0360	.0775	.2940			.1490		.0940	.1000	.0440	.0210	-.0090
20.DDD			.4940	.0640	.0930	.3880			.2020		.1050				
40.DDD			.6770	.1410	.1510	.4060			.2610		.1330	.0790	.0750	.0390	.1400
55.DDD			.7690	.2330	.1990	.5490			.4800		.3830				
70.DDD			.8270	.2350	.2340	.3370			.5430		.4580	.1910	.0900	.1070	.1270
90.DDD		1.4440	.8640	.3250	.2570	.3420			.4460		.4760	.1840	.1090	.0900	.1140
120.DDD			.8860	.4070	.3750	.4250			.5450		.3120	.1370	.1230	.0900	.0820
142.DDD										.2090					
150.DDD			.8430	.3880	.4270	.5290			1.1240		.1210	.0680	.1030	.1000	.0750
157.DDD								1.3110							
162.DDD									1.1180						
165.DDD											.0190	.0740	.0940	.1120	.0750
169.DDD									.9920						
172.DDD							1.2620								
180.DDD	1.6970	1.3260	.6640	.3700	.3810	.5640			1.2550		-.0330	-.0260	-.0010	.0080	-.0530

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.DDD	.0090							-.1440		-.1360
40.DDD	.1150	.1070		.2100	.1240	.0800	-.0310			-.1310
70.DDD		.0770	.0490	.0460	.1130	.1120	.0830	.0890		
90.DDD		.0950	.0610	.1200	.1570	.1670	.1180	.0850		
105.DDD				.2230	.2350	.1680	.1080	.0690		
110.DDD									.0760	
120.DDD		.0830	.0730	.5260	.3630	.1370	.1140	.1020	.0910	
135.DDD				.5470	.4780	.0590	.0540	.0700		
150.DDD		.0610	.0550	.1750	.2490	-.0090	.0870	.1650		
165.DDD		.0600		.1970	.3560	.2470	.2920	.1720		
180.DDD		-.0910	-.0690	-.0050						

AMES 87-707 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNB02)

MACH (1) = 2.498 BETAT (2) = -6.28

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7020	.9810	.4730	.0350	.1160	.2470			.1630		.1050	.0990	.0510	.0260	.0070
20.000			.5320	.0690	.1220	.2770			.2260		.1050				
40.000			.6510	.1500	.1460	.1930			.2610		.1320	.0860	.0480	.0270	.1150
55.000			.7110	.2030	.1750	.2650			.4490		.3570				
70.000			.7550	.2210	.1890	.2780			.3360		.4220	.1650	.0610	.0820	.1160
90.000		1.3830	.7950	.2730	.2050	.2680			.3640		.4120	.1600	.0810	.0700	.0830
120.000			.8350	.3670	.3280	.3670			.4650		.2380	.0690	.1120	.0750	.0650
142.000										.1720					
150.000			.8170	.3680	.3990	.4950			1.0640		.0990	.0350	.0520	.0770	.0630
157.000								1.2690							
162.000									1.0660						
165.000											-.0020	.0340	.0530	.0880	.0610
169.000									.9950						
172.000							1.2780								
180.000	1.7020	1.3350	.6630	.3750	.3730	.5530			1.2740		-.0400	-.0290	.0120	.0140	-.0130

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0180							-.1460		-.1300
40.000	.0930	.0890		.1640	.0870	.0410	-.0500			-.1460
70.000		.0540	.0240	.0240	.0760	.0890	.0620	.0660		
90.000		.0750	.0360	.0820	.1270	.1500	.0980	.0590		
105.000				.1850	.1980	.1480	.0890	.0500		
110.000									.0540	
120.000		.0650	.0550	.4620	.2980	.1170	.0940	.0860	.0720	
135.000				.5530	.4690	.0420	.0550	.0780		
150.000		.0500	.0460	.1820	.2820	.0110	.1080	.1780		
165.000		.0480		.1920	.3610	.2780	.2860	.1470		
180.000		-.0390	-.0440	.0590						

MACH (1) = 2.498 BETAT (3) = -4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7100	.9590	.4240	.0150	.0170	.2110			.1980		.1150	.1430	.0640	.0850	.0330
20.000			.4730	.0430	.0560	.2060			.2150		.1210				
40.000			.5950	.1120	.0790	.1220			.2820		.1200	.0730	.0460	.0250	.0960
55.000			.6460	.1510	.1360	.2200			.3380		.3220				
70.000			.6880	.1490	.1430	.2220			.2460		.3890	.1340	.0320	.0660	.0810
90.000		1.3210	.7320	.2250	.1580	.2060			.2680		.2500	.1350	.0620	.0430	.0580
120.000			.7830	.3280	.2880	.3110			.4300		.1790	-.0030	.0810	.0620	.0500

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB02)

MACH (1) = 2.498 BETAT (3) = -4.17

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1270					
150.000			.7880	.3530	.3790	.5010			1.1010		.0640	.0030	.0190	.0580	.0600
157.000								1.2160							
162.000									1.0260						
165.000											-.0250	-.0110	.0260	.0440	.0590
169.000									.9960						
172.000							1.2370								
180.000	1.7100	1.3490	.6650	.3730	.3800	.5810			1.2760		-.0510	-.0340	.0040	.0110	.0210

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0350							-.1720		-.1230
40.000	.0690	.0750		.1170	.0490	-.0290	-.1560			-.1570
70.000		.0360	.0110	.0070	.0570	.0470	.0230	.0470		
90.000		.0540	.0260	.0750	.1010	.0960	.0540	.0470		
105.000				.1580	.1430	.0970	.0460	.0370		
110.000									.1130	
120.000		.0540	.0490	.3910	.2530	.0530	.0450	.0750	.0600	
135.000				.5650	.4620	.0690	.0190	.0870		
150.000		.0410	.0410	.1920	.3280	.0690	.0980	.1880		
165.000		.0370		.1920	.3890	.2650	.2530	.1270		
180.000		.0000	.0070	.0910						

MACH (1) = 2.498 BETAT (4) = -2.06

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7190	.9590	.3890	-.0040	.0220	.1980			.0960		.1430	.1570	.1220	.0830	.0390
20.000			.4340	.0040	.0370	.2150			.1360		.1250				
40.000			.5420	.0530	.0670	.1040			.3000		.1140	.0830	.0840	.0380	.0760
55.000			.5840	.1010	.0770	.1870			.1620		.2970				
70.000			.6150	.1220	.0940	.1740			.1910		.3440	.1140	.0230	.0420	.0630
90.000		1.2520	.6600	.1700	.1150	.1610			.2140		.1660	.0990	.0550	.0240	.0460
120.000			.7270	.2820	.2490	.2290			.2830		.1440	-.0210	.0010	.0470	.0380
142.000										.0960					
150.000			.7540	.3310	.3540	.4480			.9450		.0490	-.0130	-.0040	.0230	.0540
157.000								1.1870							
162.000									.9850						
165.000											-.0300	-.0250	.0110	.0180	.0550
169.000									.9930						
172.000							1.2810								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB02)

MACH (1) = 2.498 BETAT (4) = -2.060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.7190	1.3590	.6690	.3750	.3790	.5010			1.2800		-.0450	-.0130	-.0020	.0110	.0220
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0430							-.1630		-.1110					
40.000	.0500	.0500		.0640	.0150	-.0490	-.1200			-.1610					
70.000		.0320	.0030	.0010	.0400	.0380	.0190	.0350							
90.000		.0500	.0210	.0780	.0660	.0790	.0420	.0340							
105.000				.1410	.1090	.0950	.0320	.0240							
110.000									.1020						
120.000		.0480	.0450	.3280	.2210	.0170	.0320	.0670	.0560						
135.000				.5770	.4710	.0180	.0170	.1130							
150.000		.0390	.0430	.2290	.4000	.0420	.1330	.1850							
165.000		.0370		.2200	.4050	.2930	.2550	.1170							
180.000		.0390	.0430	.0460											

MACH (1) = 2.498 BETAT (5) = 2.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7170	.9650	.4540	.0260	.0490	.2010			.0930		.1500	.1650	.1300	.0690	.0420
20.000			.4580	.0280	.0510	.1810			.1000		.1200				
40.000			.4860	.0430	.0460	.0890			.1450		.1110	.1260	.0910	.0520	.0360
55.000			.4850	.0490	.0380	.1060			.1200		.2420				
70.000			.4850	.0520	.0320	.0970			.1290		.1390	.0680	-.0120	.0250	.0560
90.000		1.1150	.5230	.0870	.0390	.0830			.1540		.0520	-.0350	.0080	-.0060	.0340
120.000			.6080	.2050	.1730	.1320			.1620		.0460	-.0750	-.0650	-.0030	.0220
142.000										.0390					
150.000			.6800	.2910	.3100	.3750			.8170		-.0070	-.0600	-.0280	-.0130	.0260
157.000								1.1110							
162.000									.9230						
165.000											-.0620	-.0570	-.0070	.0090	.0070
169.000									.9930						
172.000							1.2760								
180.000	1.7170	1.3820	.6640	.3710	.3850	.4950			1.2750		-.0480	-.0140	-.0040	.0140	.0210
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0400							-.1460		-.1100					
40.000	.0220	.0350		.0050	-.0460	-.0930	-.1170			-.1190					

AMES 87-707 IA9 OEA + 33 + T9 ORBITER FUSELAGE (RBNB02)

MACH (1) = 2.490 BETAT (5) = 2.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		.0280	-.0080	-.0080	.0300	.0230	-.0020	.0020		
90.000		.0490	.0190	.0740	.0540	.0380	.0070	.0040		
105.000				.0990	.0490	.0450	.0000	-.0040		
110.000									-.0010	
120.000		.0500	.0500	.2250	.1310	-.0610	-.0290	.0270	.0300	
135.000				.0690	.4560	-.0090	.0020	.0480		
150.000		.0450	.0530	.2040	.5380	.0980	.1360	.1230		
165.000		.0380		.1180	.4630	.3060	.2140	.1150		
180.000		.0370	.0440	.0440						

MACH (1) = 2.490 BETAT (6) = 4.320

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7030	.9810	.4670	.0350	.0730	.2130			.1060		.1060	.1470	.0860	.0710	.0350
20.000			.4610	.0300	.0620	.1780			.0840		.1040				
40.000			.4740	.0350	.0490	.0630			.1140		.0670	.1320	.0720	.0470	.0170
55.000			.4560	.0310	.0480	.0690			.0800		.1280				
70.000			.4360	.0220	.0330	.0750			.1110		.1020	-.0090	-.0110	.0090	.0450
90.000		1.0380	.4620	.0550	.0170	.0690			.1020		.0490	-.0500	-.0610	-.0090	.0220
120.000			.5580	.1710	.1430	.1500			.1560		.0180	-.0490	-.0870	-.0470	.0150
142.000										.0130					
150.000			.6410	.2700	.2870	.3580			.7500		-.0230	-.0710	-.0400	-.0250	-.0060
157.000								.9840							
162.000									.9120						
165.000											-.0710	-.0550	-.0180	-.0050	-.0190
169.000									.9900						
172.000							1.1750								
180.000	1.7090	1.3530	.6580	.3710	.3870	.5350			1.2630		-.0400	-.0160	.0000	.0050	.0190

X/LB	.5073	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0930							-.1750		-.1230
40.000	.0080	.0180		-.0390	-.0740	-.1280	-.1740			-.1120
70.000		.0200	-.0100	-.0080	.0320	.0040	-.0290	-.0110		
90.000		.0410	.0140	.0530	.0380	.0150	-.0210	-.0110		
105.000				.0830	.012	.0140	-.0310	-.0180		
110.000									-.0060	
120.000		.0490	.0380	.2320	.0680	-.1440	-.0840	-.0080	.0060	
135.000				.7580	.4490	-.0290	-.0310	.0090		
150.000		.0310	.0340	.2290	.6080	.1040	.0940	.0900		

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU2)

MACH (1) = 2.498 BETAT (6) = 4.320

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0110		.1250	.5680	.2450	.1310	.0710		
180.000		.0040	.0090	.0480						

MACH (1) = 2.498 BETAT (7) = 6.480

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8980	.9650	.4450	.0310	.0650	.2390			.1450		.1110	.0990	.0430	.0190	.0060
20.000			.4360	.0260	.0460	.2020			.1030		.1020				
40.000			.4270	.0250	.0230	.0680			.0800		.0540	.1160	.0470	.0180	-.0090
53.000			.4010	.0100	.0090	.0670			.0980		.1060				
70.000			.3770	-.0090	.0020	.0410			.0880		.0950	-.0290	-.0540	.0400	.0360
90.000		.9880	.4050	.0230	-.0130	.0290			.0610		-.0110	-.0790	-.0690	-.0310	.0140
120.000			.5070	.1410	.1150	.0990			.0960		-.0210	-.1110	-.1130	-.0870	-.0070
142.000										-.0480					
150.000			.6110	.2520	.2650	.3750			.7020		-.0400	-.0840	-.0550	-.0350	-.0110
157.000								1.0210							
162.000									.8880						
165.000											-.0870	-.0580	-.0260	-.0250	-.0560
169.000									.9790						
172.000							1.2140								
180.000	1.8980	1.3480	.8520	.3640	.3810	.5090			1.2510		-.0380	-.0310	.0060	.0080	-.0050

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0280							-.1710		-.1300
40.000	-.0010	.0090		-.0740	-.0900	-.1470	-.1650			-.1150
70.000		.0230	-.0080	-.0090	.0210	.0100	-.0180	-.0160		
90.000		.0350	.0110	.0510	.0390	.0150	-.0190	-.0220		
105.000				.0840	.0120	.0140	-.0340	-.0260		
110.000									-.0090	
120.000		.0380	.0280	.2020	.0810	-.1090	-.0850	-.0470	-.0300	
135.000				.7090	.4430	-.0390	-.0560	-.0350		
150.000		-.0420	-.0380	.1110	.3670	.1450	.0850	.0740		
165.000		-.0810		.1110	.3980	.1380	.0910	.0340		
180.000		-.0350	-.0330	.0600						

AMES 87-707 IA9 OEA + 83 + T9 ORBITER FUSELAGE (RBNB02)

MACH (1) = 2.490 BETAT (8) = 8.590

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0020	.9710	.3870	.0330	.0730	.2020			.1370		.0930	.0980	.0350	.0170	-.0050
20.000			.3680	.0180	.0420	.2030			.1090		.0600				
40.000			.3710	-.0090	.0030	.0780			.0480		.0020	-.0010	-.0300	-.0210	-.0240
55.000			.3540	-.0100	-.0210	.0550			.0820		.0940				
70.000			.3320	-.0370	-.0240	.0120			.0770		.0920	-.0340	-.0750	-.0210	.0290
90.000		.9300	.3550	-.0070	-.0380	-.0670			.0460		-.0490	-.0970	-.0840	-.0710	-.0420
120.000			.4580	.1100	.0830	.0610			.0590		-.0480	-.1270	-.1280	-.1060	-.0460
142.000										-.0310					
150.000			.5750	.2330	.2400	.3180			.0310		-.0590	-.0950	-.0670	-.0390	-.0320
157.000								.9260							
182.000									.0720						
185.000											-.1060	-.0610	-.0370	-.0620	-.0850
189.000									.0680						
172.000							1.1340								
180.000	1.0880	1.3370	.6470	.3570	.3780	.5410			1.2330		-.0340	-.0350	.0010	.0150	-.0530

X/LB	.5073	.6026	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0030							-.1600		-.1420
40.000	-.1200	.0080		-.0800	-.1020	-.1630	-.1520			-.1380
70.000		.0240	-.0080	-.0070	.0190	.0240	-.0180	-.0280		
90.000		.0230	-.0090	.0280	.0490	.0100	-.0260	-.0340		
105.000				.0930	.0260	.0100	-.0340	-.0320		
110.000									-.0380	
120.000		.0130	.0070	.2090	.0260	-.1090	-.0980	-.0590	-.0560	
135.000				.4270	.3870	-.0520	-.0810	-.0580		
150.000		-.0890	-.0840	.0480	.1770	.1130	.0510	.0310		
165.000		-.0950		.0540	.2120	.0490	.0170	-.0470		
180.000		-.0840	-.0670	-.0030						

MACH (2) = 2.999 BETAT (1) = -8.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0140	.0440	.1410			.1780		.1220	.0920	.0940	.0330	.0150
20.000			.5210	.0530	.0450	.1350			.3060		.1320				
40.000			.7080	.1640	.0920	.1640			.4130		.1990	.1320	.0520	.0830	.0770
55.000			.7360	.2470	.2010	.2470			.3040		.4490				
70.000			.8830	.2840	.2370	.2420			.2760		.4950	.2490	.1300	.1430	.1350
90.000		.0000	.9430	.3520	.2650	.2730			.3080		.2770	.2190	.1590	.1210	.1180
120.000			.9530	.4200	.3810	.4110			.5460		.2830	.0840	.0720	.1250	.0890

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB02)

MACH (2) = 2.999 BETAT (1) = -8.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.2640					
150.000			.0980	.4200	.4140	.5050			1.2010		.1140	.0840	.0630	.0770	.0740
157.000								1.3840							
162.000									1.2550						
165.000											.0630	.0660	.0770	.0570	.0840
169.000									1.1430						
172.000							1.2830								
180.000	.0000	.0000	.0960	.3810	.3700	.5070			1.4420		.0010	-.0090	.0130	-.0190	-.0300

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0050							-.1280		-.1160
40.000	.1320	.1380		.2370	.1880	.1080	.0280			-.0850
75.000		.0680	.0270	.0320	.0830	.0940	.0700	.0860		
90.000		.0820	.0470	.0580	.1310	.1620	.1350	.1180		
109.000				.1780	.1740	.2060	.1330	.1090		
115.000									.1140	
120.000		.0780	.0640	.5180	.3570	.1150	.1340	.1410	.1250	
135.000				.5490	.4890	.0570	.0420	.0860		
150.000		.0680	.0650	.1650	.2480	-.0080	.0170	.1370		
165.000		.0740		.1690	.3060	.1970	.2540	.1640		
180.000		-.0710	-.0550	-.0260						

MACH (2) = 2.999 BETAT (2) = -6.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0110	.0300	.2170			.1510		.1060	.1180	.1070	.0410	-.0070
20.000			.4980	.0410	.0310	.1240			.2400		.1430				
40.000			.6640	.1310	.0730	.1390			.1830		.1880	.1180	.0720	.0650	.0590
55.000			.7330	.2110	.1620	.2310			.2380		.4120				
75.000			.8120	.2460	.1930	.2140			.2300		.3030	.2120	.1090	.1150	.1110
90.000		.0000	.8710	.3010	.2180	.2260			.2620		.2250	.1000	.1340	.0940	.0910
120.000			.9010	.3930	.3360	.3630			.4520		.2390	.0510	.0430	.0960	.0690
142.000										.2150					
150.000			.8690	.3920	.3950	.4780			1.4380		.0960	.0580	.0430	.0410	.0570
157.000								1.3480							
162.000									1.2120						
165.000											.0440	.0360	.0530	.0360	.0660
169.000									1.1390						
172.000							1.3070								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB02)

MACH (2) = 2.999 BETAT (2) = -6.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	.0000	.0000	.7020	.3910	.3720	.4970			1.4590		-.0040	-.0120	.0070	.0040	-.0010

X/LB	.5873	.6826	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0120							-.1410		-.1150
40.000	.0050	.0770		.1900	.1390	.0590	-.0090			-.0960
70.000		.0490	.0080	.0140	.0500	.0580	.0360	.0630		
90.000		.0990	.0260	.0330	.0990	.1230	.1030	.0890		
105.000				.1550	.1390	.1550	.0980	.0840		
110.000									.0750	
120.000		.0650	.0540	.4770	.3070	.0570	.0840	.1110	.1030	
135.000				.5530	.4730	.0540	.0210	.0600		
150.000		.0580	.0490	.1590	.2580	-.0110	.0270	.1280		
165.000		.0990		.1570	.3030	.2210	.2470	.1540		
180.000		-.0300	-.0390	.0310						

MACH (2) = 2.999 BETAT (3) = -4.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0080	.0170	.1870			.1320		.0530	.1350	.1010	.0470	.0250
20.000			.4800	.0290	.0140	.1170			.1980		.1260				
40.000			.6150	.1000	.0530	.1330			.1410		.1910	.1100	.0800	.0520	.0420
55.000			.6630	.1680	.1200	.1810			.1900		.3550				
70.000			.7310	.1970	.1470	.1650			.1810		.2330	.1720	.0980	.0880	.0900
90.000		.0000	.7950	.2510	.1720	.1760			.1990		.1800	.0620	.0820	.0790	.0710
120.000			.8420	.3500	.2990	.3070			.4290		.2000	.0320	.0190	.0450	.0550
142.000										.1810					
150.000			.8370	.3710	.3780	.4530			1.0670		.0850	.0440	.0190	.0240	.0450
157.000								1.2900							
162.000									1.1740						
165.000											.0350	.0180	.0300	.0260	.0360
169.000									1.1410						
172.000							1.2810								
180.000	.0000	.0000	.7070	.3700	.3750	.5150			1.4740		-.0010	-.0050	.0150	.0090	.0040

X/LB	.5873	.6826	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	.0190							-.1320		-.1120
40.000	.0630	.0700		.1490	.0980	.0250	-.0410			-.1070

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU2)

MACH (2) = 2.999 BETAT (3) = -4.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		.0300	-.0060	-.0040	.0290	.0350	.0250	.0430		
90.000		.0460	.0160	.0240	.0670	.0930	.0800	.0650		
105.000				.1330	.1000	.1190	.0740	.0570		
110.000									.0550	
120.000		.0580	.0450	.3950	.2630	.0280	.0500	.0870	.0800	
135.000				.5470	.4570	.0280	.0170	.0450		
150.000		.0500	.0440	.1580	.2900	.0060	.0450	.1190		
165.000		.0480		.1530	.3120	.2360	.2430	.1380		
180.000		.0120	.0040	.0580						

MACH (2) = 2.999 BETAT (4) = -2.100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0100	.0130	.2330			.1150		.0320	.1750	.1160	.1080	.0360
20.000			.4640	.0260	.0030	.1880			.1440		.0560				
40.000			.5710	.0820	.0230	.1280			.1590		.1880	.0970	.0710	.0480	.0630
55.000			.5930	.1340	.0840	.1350			.1480		.2020				
70.000			.6680	.1590	.1110	.1200			.1340		.1900	.0640	.0760	.0650	.0710
90.000		.0000	.7250	.2080	.1350	.1300			.1640		.1250	.0160	.0180	.0640	.0510
120.000			.7880	.3160	.2610	.2340			.3150		.1560	.0040	.0000	.0000	.0430
142.000										.1490					
150.000			.8080	.3570	.3560	.4200			1.0030		.0680	.0190	.0020	.0110	.0190
157.000								1.2700							
162.000									1.1380						
165.000											.0190	-.0010	.0130	.0180	.0110
169.000									1.1400						
172.000							1.3250								
180.000	.0000	.0000	.7150	.3890	.3780	.4530			1.4820		-.0090	.0030	.0130	.0110	.0100

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0220							-.1150		-.1090
40.000	.0700	.0440		.1010	.0630	-.0220	-.0520			-.1190
70.000		.0150	-.0180	-.0120	.0150	.0180	.0070	.0240		
90.000		.0340	.0060	.0260	.0550	.0650	.0460	.0450		
105.000				.1160	.0760	.0780	.0430	.0400		
110.000									.0490	
120.000		.0470	.0370	.3160	.2200	.0000	-.0070	.0590	.0630	
135.000				.5190	.4550	.0000	.0110	.0410		
150.000		.0430	.0390	.1730	.3310	.0220	.0590	.1180		

AMES 87-767 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB02)

MACH (2) = 2.999 BETAT (4) = -2.100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
180.000		.0400		.1720	.3110	.2290	.2200	.1210		
180.000		.0170	.0170	.0250						

MACH (2) = 2.999 BETAT (5) = 2.230

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0150	.0260	.1670			.1170		.0330	.1400	.1150	.1150	.0410
20.000			.4290	.0120	.0190	.1110			.1160		.0310				
40.000			.4910	.0350	.0160	.0630			.0940		.0650	.0840	.1100	.0450	.0550
55.000			.5040	.0800	.0300	.0740			.0780		.1250				
70.000			.5300	.0810	.0450	.0650			.0720		.0950	.0440	-.0110	.0330	.0500
90.000		.0000	.5760	.1220	.0650	.0660			.1140		.0230	-.0450	-.0460	-.0110	.0270
120.000			.6620	.2340	.1910	.1860			.1770		.0740	-.0470	-.0440	-.0490	.0020
142.000										.0930					
150.000			.7260	.3100	.3100	.3680			.8630		.1320	-.0260	-.0230	-.0050	-.0080
157.000								1.2020							
162.000									1.0810						
165.000											-.0170	-.0290	-.0460	.0100	.0050
169.000									1.1340						
172.000							1.3140								
180.000	.0000	.0000	.7100	.3780	.3800	.4550			1.4750		-.0220	-.0050	.0160	.0080	.0120

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0240							-.1190		-.1070
40.000	.0360	.0070		.0480	-.0190	-.0650	-.0720			-.1290
70.000		.0120	-.0160	-.0160	.0110	.0250	.0020	.0020		
90.000		.0330	.0130	.0490	.0570	.0370	.0140	.0110		
105.000				.0950	.0500	.0380	.0130	.0070		
110.000									.0190	
120.000		.0370	.0310	.1720	.1460	-.0220	-.0310	.0110	.0320	
135.000				.6170	.4320	.0130	.0140	.0390		
150.000		.0120	.0330	.2210	.4770	.0980	.0990	.0930		
165.000		-.0040		.0640	.3120	.2960	.1790	.1140		
180.000		.0190	.0240	.0220						

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB02)

MACH (2) = 2.999 BETAT (6) = 4.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0430	.0390	.1860			.1340		.0670	.1430	.1060	.0550	.0290
20.000			.4160	.0330	.0290	.1290			.1190		.0270				
40.000			.4560	.0250	.0270	.0810			.0810		.0330	.0700	.1220	.0390	.0430
55.000			.4590	.0440	.0170	.0590			.0690		.1040				
70.000			.4690	.0530	.0170	.0570			.0620		.0920	.0060	-.0330	.0190	.0360
90.000		.0000	.5110	.0880	.0360	.0360			.0680		.0080	-.0510	-.0450	-.0430	.0110
120.000			.6020	.2020	.1580	.1580			.1660		.0520	-.0460	-.0610	-.0590	-.0270
142.000										.0730					
150.000			.6820	.2910	.2880	.3130			.7890		.0250	-.0350	-.0300	-.0130	-.0140
157.000								1.0560							
162.000									1.0790						
163.000											-.0250	-.0260	-.0060	.0060	-.0110
169.000									1.1380						
172.000							1.1970								
180.000	.0000	.0000	.7020	.3800	.3770	.4780			1.4580		-.0050	.0050	.0180	.0490	.0060

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0180							-.1550		-.1090
40.000	.0150	-.0010		.0120	-.0300	-.0680	-.1077			-.1230
70.000		.0160	-.0110	-.0100	.0130	.0000	-.0250	.0000		
90.000		.0250	.0110	.0480	.0480	.0050	-.0170	.0070		
105.000				.0780	.0330	-.0010	-.0260	.0010		
110.000									.0250	
120.000		.0270	.0270	.1800	.1150	-.0570	-.0680	-.0110	.0130	
135.000				.6740	.4240	-.0130	-.0310	.0180		
150.000		-.0480	.0070	.1540	.0060	.0760	.0630	.0680		
165.000		-.0240		.0650	.3580	.1760	.0810	.0690		
180.000		.0130	.0050	.0370						

MACH (2) = 2.999 BETAT (7) = 6.580

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0120	.0320	.2050			.1440		.1320	.1350	.1050	.0390	-.0020
20.000			.4040	.0040	.0230	.2040			.1080		.0470				
40.000			.4280	.0080	.0060	.0650			.0870		.0080	.0490	.0310	.0070	.0120
55.000			.4270	.0210	.0000	.0320			.0530		.0990				
70.000			.4170	.0250	-.0010	.0300			.0390		.0690	-.0110	-.0490	-.0100	.0210
90.000		.0000	.4500	.0570	.0130	.0110			.0310		-.0310	-.0850	-.0740	-.0580	-.0070
120.000			.5480	.1690	.1300	.1150			.1220		.0140	-.0730	-.0750	-.0760	-.0650

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB02)

MACH (2) = 2.999 BETAT (7) = 6.580

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0440					
150.000			.6430	.2710	.2660	.3140			.7360		.0010	-.0580	-.0480	-.0270	-.0140
157.000								1.0680							
162.000									1.0470						
165.000											-.0510	-.0370	-.0110	-.0140	-.0370
169.000									1.1220						
172.000							1.2210								
180.000	.0000	.0000	.6940	.3720	.3710	.4550			1.4460		-.1070	-.0130	.0110	.0020	-.0630
X/LB	.5073	.6620	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0130							-.1490		-.1200					
40.000	-.0100	-.0120		-.0190	-.0650	-.0910	-.1260			-.1190					
70.000		.0140	-.0130	-.0110	.0070	.0070	-.0220	-.0080							
90.000		.0120	-.0020	.0170	.0410	-.0020	-.0250	-.0080							
105.000				.0770	.0310	-.0120	-.0370	-.0110							
110.000									.0150						
120.000		.0130	.0150	.1360	.0680	-.0770	-.0820	-.0310	-.0150						
135.000				.3510	.4060	-.0340	-.0540	-.0230							
150.000		-.0280	-.0420	.0580	.3410	.1140	.0560	.0470							
165.000		-.0440		.0760	.2470	.0680	.0410	.0170							
180.000		-.0250	-.0390	.0040											

MACH (2) = 2.999 BETAT (8) = 8.750

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0020	.0000	.0140	.0370	.1890			.1680		.1150	.0960	.0960	.0320	.0170
20.000			.3970	.1620	.0110	.1640			.1210		.0760				
40.000			.4030	-.0010	-.0120	.0730			.0660		-.0620	.0300	-.0110	-.0490	-.0320
55.000			.4000	.0040	-.0100	.0170			.0440		.0950				
70.000			.3690	.0030	-.0170	.0140			.0270		.0590	-.0170	-.0480	-.0280	.0110
90.000		.0000	.2970	.0330	-.0060	-.0100			-.0060		-.0470	-.0910	-.0770	-.0720	-.0200
120.000			.4950	.1390	.1060	.0860			.0800		-.0250	-.0780	-.0900	-.0830	-.0840
142.000										.0280					
150.000			.6080	.2530	.2490	.2970			.6720		-.0070	-.0590	-.0490	-.0310	-.0150
157.000								.9970							
162.000									1.0330						
165.000											-.0620	-.0340	-.0150	-.0370	-.0530
169.000									1.1130						
172.000							1.1420								

AMCS 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB02)

MACH (2) = 2.999 BETAT (8) = 8.750

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
180.000	.0000	.0000	.6940	.3680	.3690	.4810			1.4220		.0060	-.0060	.0010	-.0080	-.0300

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0650							-.1490		-.1210
40.000	-.0390	-.0220		-.0190	-.0820	-.1050	-.1390			-.0950
70.000		.0490	-.0110	-.0070	-.0480	.0330	-.0030	.0000		
90.000		-.0080	-.0200	-.0230	.0200	-.0170	-.0380	-.0260		
105.000				.0520	.0150	-.0210	-.0430	-.0220		
110.000									-.0040	
120.000		-.0020	-.0080	.1300	.0270	-.0640	-.0780	-.0380	-.0330	
135.000				.3040	.2820	-.0660	-.0940	-.0750		
150.000		-.0640	-.0660	.0510	.1940	.1010	.0280	.0260		
165.000		-.0620		.0460	.1370	.0160	-.0110	-.0340		
180.000		-.0670	-.0630	-.0250						

MACH (3) = 3.502 BETAT (1) = -8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	.0350	.0360	.1120			.1960		.1280	.1200	.0950	.0540	.0370
25.000			.5440	.0680	.0120	.1110			.2040		.1940				
40.000			.7480	.1770	.0980	.2260			.1210		.2600	.1580	.0930	.0690	.0720
55.000			.7930	.2780	.2140	.2120			.2620		.4190				
70.000			.9670	.3290	.2520	.2440			.2490		.3070	.2620	.1680	.1540	.1420
90.000		.0000	1.0430	.3910	.2830	.2780			.2870		.2810	.1290	.1530	.1390	.1220
120.000			1.0520	.4690	.4030	.4270			.5730		.2890	.0960	.0570	.0980	.0910
142.000										.2860					
150.000			.9780	.4430	.4280	.5110			1.2500		.1010	.0920	.0700	.0450	.0630
157.000								1.4450							
162.000									1.3570		.0770	.0730	.0840	.0440	.0660
165.000															
169.000									1.2500						
172.000							1.2940								
180.000	.0000	.0000	.7510	.4030	.3790	.4400			1.5520		.0190	.0170	.0050	-.0300	-.0270

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0810							-.0820		-.0840
40.000	.0700	.1050		.2490	.2000	.1210	.0830			-.0510

AMES 87-707 IA9 OEA + 33 + T9 ORBITER FUSELAGE (RBNBU2)

MACH (3) = 3.502 BETAT (1) = -8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		.0640	.0230	.0280	.0630	.0980	.0830	.0760		
90.000		.0820	.0450	.0510	.1070	.1440	.1530	.1290		
105.000				.1700	.1640	.1940	.1630	.1210		
110.000									.1350	
120.000		.0680	.0800	.5160	.4010	.1320	.1240	.1390	.1600	
135.000				.5050	.4970	.0650	.0380	.0570		
150.000		.0610	.0570	.1500	.2330	.0640	.0230	.0880		
165.000		.0720		.1480	.2650	.1710	.2340	.1380		
180.000		-.0570	-.0510	-.0390						

MACH (3) = 3.502 BETAT (2) = -6.520

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0370	.0330	.1250			.1690		.0810	.1180	.0850	.0550	.0250
20.000			.5230	.0580	.0270	.1080			.1850		.1710				
40.000			.7000	.1490	.0740	.2130			.1290		.2790	.1440	.0840	.0650	.0630
55.000			.7430	.2340	.1700	.1810			.2210		.2430				
70.000			.8060	.2780	.2040	.1940			.2030		.2550	.1290	.1340	.1230	.1170
90.000		.0000	.9600	.3390	.2360	.2310			.2270		.2210	.0850	.0610	.1170	.1220
120.000			.9900	.4320	.3580	.3780			.4820		.2390	.0610	.0360	.0530	.0580
142.000										.2460					
150.000			.9460	.4280	.4050	.4810			1.1840		.0740	.0630	.0480	.0270	.0430
157.000								1.4080							
162.000									1.3140						
165.000											.0530	.0390	.0630	.0270	.0330
169.000									1.2470						
172.000							1.3270								
180.000	.0000	.0000	.7810	.4080	.3810	.4510			1.5910		.0050	.0110	-.0020	.0070	-.0080

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0020							-.0810		-.0900
40.000	.0480	.0690		.1890	.1450	.0680	.0380			-.0630
70.000		.0470	.0070	.0000	.0360	.0740	.0390	.0540		
90.000		.0690	.0270	.0280	.0750	.1160	.1210	.1040		
105.000				.1410	.1300	.1400	.1210	.0980		
110.000									.1140	
120.000		.0580	.0490	.4850	.3430	.0990	.0730	.1100	.1070	
135.000				.5320	.4700	.0450	.0280	.0450		
150.000		.0520	.0470	.1460	.2390	.0620	.0220	.0740		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB02)

MACH (3) = 3.502 BETAT (2) = -6.520

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		.0560		.1290	.2550	.1910	.2350	.1350		
180.000		-.0180	-.0380	.0100						

MACH (3) = 3.502 BETAT (3) = -4.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0310	.0260	.1120			.1490		.0610	.0780	.1070	.0540	.0280
20.000			.5000	.0440	.0270	.1130			.1750		.1020				
40.000			.6500	.1110	.0490	.1530			.1160		.2110	.1330	.0720	.0590	.0510
55.000			.6890	.1770	.1300	.1410			.1700		.1820				
70.000			.7990	.2220	.1620	.1560			.1550		.1970	.0940	.0760	.0990	.0920
90.000		.0000	.8730	.2830	.1910	.1840			.1780		.1660	.0480	.0280	.0830	.0780
120.000			.9210	.3770	.3160	.3240			.4250		.1950	.0350	.0110	.0270	.0500
142.000										.2070					
150.000			.9050	.4020	.3870	.4450			1.1120		.0570	.0400	.0290	.0140	.0220
157.000								1.3670							
162.000									1.2750						
165.000											.0360	.0120	.0400	.0160	.0240
169.000									1.2420						
172.000							1.3250								
180.000	.0000	.0000	.7640	.4040	.3860	.4550			1.6070		-.0420	.0050	.0030	.0140	.0420

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0010							-.0870		-.0840
40.000	.0360	.0550		.1420	.1190	.0610	.0020			-.0760
70.000		.0320	-.0040	-.0030	.0210	.0470	.0320	.0380		
90.000		.0490	.0180	.0170	.0550	.0930	.0930	.0800		
105.000				.1270	.1070	.1040	.0880	.0700		
110.000									.0930	
120.000		.0520	.0440	.4420	.2990	.0670	.0520	.0620	.0810	
135.000				.5250	.4630	.0310	.0220	.0400		
150.000		.0470	.0400	.1290	.2640	.0670	.0260	.0900		
165.000		.0450		.1310	.2600	.2130	.2110	.1420		
180.000		.0040	.0015	.0450						

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU2)

MACH (3) = 3.502 BETAT (4) = -2.140

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0330	.0120	.1630			.1440		.0540	.0690	.1370	.0610	.0830
20.000			.4820	.0380	-.0050	.1140			.1830		.0680				
40.000			.6050	.0760	.0290	.1410			.1160		.1230	.1350	.0660	.0650	.0610
55.000			.6510	.1390	.0160	.1120			.1370		.1510				
70.000			.7230	.1780	.1300	.1170			.1200		.1640	.0680	.0260	.0770	.0740
90.000		.0000	.7910	.2340	.1540	.1450			.1490		.1310	.0250	.0090	.0330	.0610
120.000			.8500	.3370	.2770	.2650			.3420		.1640	.0210	-.0010	.0060	.0310
142.000										.1830					
150.000			.8650	.3800	.3670	.4190			1.0390		.0530	.0320	.0180	.0030	.0140
157.000								1.3240							
162.000									1.2450						
165.000											.0290	.0090	.0080	.0110	.0190
169.000									1.2430						
172.000							1.3410								
180.000	.0000	.0000	.7670	.4050	.3080	.4470			1.6120		.0030	.0180	.0090	.0210	.0190
X/LB	.5073	.6806	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0092					
PHI															
.000	.0350							-.0030		-.0620					
40.000	.0560	.0640		.1170	.0080	.0200	-.0030			-.0790					
70.000		.0220	-.0100	-.0080	.0160	.0360	.0170	.0280							
90.000		.0370	.0110	.0120	.0430	.0750	.0680	.0590							
105.000				.1180	.0690	.0690	.0560	.0500							
110.000									.0690						
120.000		.0480	.0400	.3360	.2530	.0430	.0260	.0280	.0560						
135.000				.4350	.4540	.0440	.0270	.0430							
150.000		.0400	.0400	.1450	.2880	.0280	.0340	.0960							
165.000		.0330		.1600	.2520	.2050	.1880	.1120							
180.000		.0100	.0100	.0150											

MACH (3) = 3.502 BETAT (5) = 2.280

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0320	.0280	.1050			.1400		.0440	.0530	.1110	.0590	.0590
20.000			.4480	.0280	.0160	.0830			.1360		.0580				
40.000			.5210	.0540	.0440	.0770			.0750		.0650	.0390	.0490	.0550	.0430
55.000			.5320	.0880	.0480	.0680			.0710		.0830				
70.000			.5800	.1090	.0640	.0680			.0450		.0820	-.0080	-.0320	.0210	.0330
90.000		.0440	.6340	.1510	.0840	.0880			.0820		.0540	-.0300	-.0470	-.0370	.0150
120.000			.7150	.2620	.2040	.1910			.2020		.0840	-.0260	-.0350	-.0390	-.0280

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RUN#42)

MACH (3) = 3.942 BETAT (5) = 2.28

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3236	.3953	.5125
PHI															
142.000										.1250					
150.000			.7840	.3370	.3240	.3740			.8910		.1429	-.1210	-.1140	-.1140	-.1030
157.000								1.2810							
162.000									1.1080						
165.000											-.1110	-.1200	-.1010	.1600	.1110
169.000									1.2240						
172.000							1.3710								
180.000	.0000	.0000	.7840	.4030	.3080	.4490			1.5920		-.1180	.1420	.1630	.1180	.1150

X/LB	.5875	.6626	.7380	.7880	.8283	.8648	.9282	.9639	1.0015	1.0392
PHI										
.000	.1910							-.1670		-.1090
40.000	.0410	.0220		.0530	.0010	-.0180	-.0280			-.1090
75.000		.1650	-.0200	-.0140	-.0040	.0310	.0150	.0070		
95.000		.1240	.0100	.0170	.0490	.0420	.0220	.0160		
105.000				.0800	.0470	.0590	.0210	.0110		
110.000									.0330	
120.000		.1270	.1210	.1300	.1350	-.1110	-.0150	-.1040	.0230	
135.000				.5610	.4010	-.1070	.0140	.0350		
150.000		-.1040	.1070	.1730	.4210	.1810	.1490	.1780		
165.000		-.1040		.1260	.2290	.2290	.1340	.1050		
180.000		.0030	.0080	.0120						

MACH (3) = 3.902 BETAT (6) = 4.480

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3236	.3953	.5125
PHI															
.000	.0000	.0000	.0000	.0520	.0520	.1000			.1960		.1630	.1040	.1080	.1080	.1530
20.000			.4320	.0410	.0490	.0810			.1310		.0380				
40.000			.4830	.0440	.0350	.0700			.0650		.0370	.1780	.0820	.0470	.0280
55.000			.4920	.0650	.0310	.0670			.0650		.0680				
75.000			.5150	.0760	.0390	.0650			.0490		.0730	-.0030	-.0370	-.0110	.0240
90.000		.0440	.5640	.1130	.0590	.0620			.0520		.0350	-.0520	-.0520	-.0490	-.0420
120.000			.6550	.2240	.1750	.1660			.1610		.0580	-.0390	-.0490	-.0490	-.0410
142.000										.1030					
150.000			.7350	.3140	.3010	.3440			.8110		.0240	-.0310	-.0230	-.0170	-.0120
157.000								1.2010							
162.000									1.1690						
165.000											-.0240	-.0310	.0030	.0020	-.0010
169.000									1.2160						
172.000							1.3060								

AMES 87-707 IA9 OEA + 33 + 39 ORBITER FUSELAGE (RBNDL#2)

MACH (3) = 3.502 BETAT (6) = 4.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3840	.3993	.5122
PHI															
180.000	.0000	.0000	.7390	.4010	.3050	.4430			1.5790		-.0480	.0110	.0670	.0130	.0430
X/LB	.5073	.6026	.7380	.7869	.8283	.8948	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0120							-.0850		-.0850					
40.000	.0240	.0060		.0210	-.0170	-.0280	-.0520			-.0980					
70.000		-.0020	-.0190	-.0130	-.0080	.0280	.0050	-.0040							
90.000		.0050	-.0030	.0210	.0300	.0310	.0050	.0050							
105.000				.0610	.0140	.0150	.0040	-.0040							
110.000									.0430						
120.000		.0070	.0080	.1530	.1070	-.0280	-.0260	-.0150	.0401						
135.000				.5930	.3590	-.0420	.0030	.0170							
150.000		-.0140	-.0150	.1140	.4550	.0750	.0610	.0520							
165.000		-.0210		.0100	.2710	.1530	.0670	.0550							
180.000		.0030	.0030	.0350											

MACH (3) = 3.502 BETAT (7) = 6.890

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3840	.3993	.5122
PHI															
.000	.0000	.0000	.0000	.0320	.0250	.1240			.1080		.0770	.1210	.0070	.0570	.0420
20.000			.4210	.0200	.0050	.1180			.1310		.0990				
40.000			.4500	.0260	-.0140	.0720			.0980		.0150	.0110	.0040	-.0130	-.0190
55.000			.4550	.0420	.0070	.0360			.0440		.0080				
70.000			.4530	.0490	.0150	.0390			.0690		.0270	-.0210	-.0370	-.0270	.0470
90.000		.0000	.4920	.0790	.0320	.0340			.0440		-.0170	-.0810	-.0990	-.0840	-.0220
120.000			.5080	.1850	.1460	.1280			.1220		.0350	-.0490	-.0630	-.0680	-.0840
142.000										.0730					
150.000			.6870	.2870	.2750	.3150			.7420		.0170	-.0424	-.0320	-.0280	-.0290
157.000								1.1280							
162.000									1.1470						
165.000											-.0380	-.0280	-.0240	-.0110	-.0250
169.000									1.2060						
172.000							1.2190								
180.000	.0000	.0000	.7470	.3920	.3770	.4310			1.5590		.0430	.0100	-.0050	.0470	-.0110
X/LB	.5073	.6026	.7380	.7869	.8283	.8948	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0050							-.0070		-.0910					
40.000	-.0180	-.0190		-.0110	-.0280	-.0430	-.0810			-.0980					

AMES 87-707 IA9 C2A + 33 + T9 ORBITER FUSELAGE (RUN802)

MACH (3) = 3.502 BETAT (7) = 6.690

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8263	.8648	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0410	-.0180	-.0130	-.0130	.0270	.0000	-.0070		
90.000		-.0660	-.0150	-.0450	.0230	.0180	.0010	-.0110		
105.000				.0540	.0190	.0120	.0000	-.0140		
110.000									.0370	
120.000		-.0140	-.0490	.1340	.0590	-.0440	-.0310	-.0210	-.0060	
135.000				.4490	.3050	-.0270	-.0380	-.0350		
150.000		-.0280	-.0340	.0510	.3160	.0880	.0630	.0380		
165.000		-.0390		.0230	.1700	.0750	.0360	.0050		
180.000		-.0150	-.0430	.0180						

MACH (3) = 3.502 BETAT (8) = 8.910

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3314	.3955	.5125
PHI															
.000	.0000	.0000	.0000	.0300	.0250	.1060			.1880		.1190	.1480	.0790	.0490	.0300
20.000			.4090	.0130	.0070	.0620			.1210		.0490				
40.000			.4200	.0120	-.0200	.0440			.0610		-.0070	-.0120	-.0290	-.0810	-.0590
55.000			.4180	.0180	-.0110	.0170			.0230		.0510				
70.000			.3990	.0210	-.0060	.0160			-.0020		.0050	-.0440	-.0990	-.0950	-.0110
90.000		.0000	.4280	.0460	.0480	.0480			-.0270		-.0510	-.0480	-.0620	-.0770	-.0370
125.000			.5300	.1530	.1130	.0980			.0690		-.0020	-.0720	-.0780	-.0810	-.0740
142.000										.0480					
150.000			.6410	.2620	.2520	.2760			.0580		-.0070	-.0810	-.0480	-.0360	-.0170
157.000								1.1290							
162.000									1.1240						
165.000											-.0690	-.0440	-.0150	-.0340	-.0320
169.000									1.1770						
172.000							1.1350								
180.000	.0000	.0000	.7350	.3610	.3700	.4140			1.5210		-.0010	.0000	-.0110	-.0290	-.0390

X/LB	.5873	.6626	.7380	.7869	.8263	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0080							-.0930		-.0950
40.000	-.0530	-.0450		.0010	-.0530	-.0850	-.0890			-.0950
70.000		-.0110	-.0240	-.0150	-.0170	.0360	.0030	-.0460		
90.000		-.0270	-.0360	-.0270	.0040	-.0050	-.0180	-.0290		
105.000				.0280	.0010	-.0080	-.0250	-.0320		
110.000									-.0180	
120.000		-.0320	-.0230	.0080	.0120	-.0580	-.0570	-.0480	-.0390	
135.000				.2480	.2220	-.0410	-.0540	-.0630		
150.000		-.0550	-.0640	.0070	.1170	.0830	.0360	.0180		

AMES 87-707 IA9 CEA + S3 + T9 ORBITER FUSELAGE (RBNBU2)

MACH (3) = 3.502 BETAT (0) = 0.910

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5075	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0570		-.0040	.0070	.0300	-.0050	-.0090		
180.000		-.0640	-.0410	-.0410						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RUN 803) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 20.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -6.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

MACH (1) = 2.490 BETAT (1) = -8.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3204	.3953	.5120
PHI															
.000	1.6340	.9420	.3870	.0250	.0580	.3030			.1460		.0690	.0860	.0260	.0460	-.0250
20.000			.4790	.0190	.0680	.3830			.1960		.0930				
40.000			.6580	.1300	.1320	.3820			.2610		.1290	.0660	.0540	.0300	.1300
55.000			.7470	.1710	.1850	.5790			.4570		.3520				
70.000			.8000	.2540	.2150	.3130			.5130		.4290	.1680	.0670	.0840	.0990
90.000		1.3910	.8270	.2980	.2350	.3190			.4240		.4540	.1580	.0840	.0680	.0820
120.000			.8320	.3690	.3390	.3870			.5250		.3080	.1110	.0870	.0690	.0580
142.000										.1920					
150.000			.7810	.3440	.3740	.4670			1.0450		.0820	.0400	.0760	.0750	.0480
157.000								1.2160							
162.000									1.0370						
165.000											-.0080	.0430	.0630	.0880	.0480
169.000									.9250						
172.000							1.1490								
180.000	1.6340	1.2520	.6000	.3210	.3280	.4760			1.1690		-.0600	-.0570	-.0190	-.0370	-.0600

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0140							-.1810		-.1330
40.000	.1180	.0910		.2170	.1270	.0530	-.0550			-.1300
70.000		.0480	.0230	.0280	.0870	.0550	.0260	.0640		
90.000		.0620	.0350	.1010	.1390	.1040	.0600	.0650		
105.000				.1690	.2090	.1360	.0550	.0540		
110.000									.0490	
120.000		.0540	.0430	.4400	.3450	.0630	.0580	.0850	.0720	
135.000				.4650	.4240	.0080	-.0130	.0400		
150.000		.0380	.0490	.1370	.1960	-.0740	.0690	.1240		
165.000		.0400		.1590	.2870	.1610	.2150	.1350		
180.000		-.1150	-.0780	-.0310						

AMES 87-707 IA9 OPA + S3 + T9 ORBITER FUSELAGE (RBNB:3)

MACH (1) = 2.490 BETAT (2) = -6.29

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6330	.9510	.4540	.0290	.0640	.2400			.1560		.0960	.0940	.0420	.0190	-.0280
20.000			.5030	.0240	.0820	.2820			.2050		.0960				
40.000			.6240	.0690	.1160	.2190			.2570		.1210	.0690	.0460	.0150	.1060
55.000			.6860	.0970	.1640	.2690			.4180		.3200				
70.000			.7360	.1560	.1740	.2620			.3240		.4010	.1540	.0540	.0610	.0750
90.000		1.3310	.7620	.2480	.1880	.2620			.3250		.3970	.1480	.0690	.0490	.0540
120.000			.7800	.3160	.2960	.3340			.4370		.2190	.0750	.0820	.0510	.0390
142.000										.1500					
150.000			.7490	.3160	.3530	.4370			.9940		.0720	.0220	.0360	.0530	.0400
157.000								1.1790							
162.000									.9950						
165.000											-.0150	.0130	.0310	.0670	.0410
169.000									.9210						
172.000							1.1620								
180.000	1.6330	1.2540	.6010	.3180	.3240	.4710			1.1850		-.0540	-.0480	-.0140	-.0010	-.0420

X/LB	.5873	.6026	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0170							-.1620		-.1290
40.000	.0990	.0700		.1640	.0900	.0280	-.0520			-.1420
70.000		.0240	-.0010	.0040	.0550	.0500	.0240	.0420		
90.000		.0410	.0140	.0590	.0950	.1000	.0610	.0440		
105.000				.1500	.1640	.1300	.0540	.0340		
115.000									.0250	
120.000		.0400	.0290	.4150	.2750	.0910	.0510	.0660	.0500	
135.000				.4750	.4120	.0230	.0140	.0420		
150.000		.0240	.0180	.1390	.2260	-.0320	.0480	.1310		
165.000		.0240		.1500	.2970	.2200	.2270	.1190		
180.000		-.0690	-.0820	.0310						

MACH (1) = 2.490 BETAT (3) = -4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6440	.9320	.4190	.0070	.0120	.2010			.1560		.1100	.1430	.0640	.0610	-.0090
20.000			.4760	.0380	.0380	.1590			.2070		.1050				
40.000			.5770	.1080	.0650	.1900			.2740		.1090	.0690	.0370	.0120	.0860
55.000			.6260	.1360	.1250	.2060			.3310		.2940				
70.000			.6610	.1660	.1280	.2010			.2270		.3640	.1260	.0310	.0420	.0500
90.000		1.2890	.6960	.2010	.1380	.1980			.2260		.2940	.1220	.0530	.0260	.0320
120.000			.7310	.2900	.2530	.2860			.3870		.1670	-.0030	.0640	.0360	.0230

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB03)

MACH (1) = 2.498 BETAT (3) = -4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1070					
150.000			.7240	.3060	.3300	.4200			.9270		.0490	-.0070	-.0040	.0360	.0310
157.000								1.1260							
162.000									.9590						
165.000											-.0340	-.0220	.0030	.0280	.0310
169.000									.9260						
172.000							1.1440								
180.000	1.6440	1.2690	.6020	.3220	.3310	.4900			1.1960		-.0610	-.0470	-.0210	-.0120	-.0040

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0190							-.1620		-.1270
40.000	.0610	.0430		.1150	.0470	-.0170	-.0740			-.1570
70.000		.0050	-.0170	-.0160	.0290	.0280	.0030	.0200		
90.000		.0200	-.0010	.0390	.0680	.0770	.0410	.0240		
105.000				.1250	.1180	.0770	.0360	.0150		
110.000									.0630	
120.000		.0250	.0170	.3540	.2300	.0480	.0330	.0490	.0370	
135.000				.4920	.4060	.0040	.0070	.0570		
150.000		.0140	.0130	.1530	.2780	-.0070	.0740	.1440		
165.000		.0130		.1540	.3290	.2280	.2190	.0960		
180.000		-.0230	-.0170	.0850						

MACH (1) = 2.498 BETAT (4) = -2.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6520	.9300	.3790	-.0020	.0180	.1960			.0970		.1400	.1600	.1180	.0610	-.0030
20.000			.4220	.0130	.0330	.1980			.1380		.1180				
40.000			.5260	.0610	.0500	.0790			.3010		.1080	.0740	.0740	.0270	.0630
55.000			.5680	.0920	.0770	.1720			.1690		.2710				
70.000			.5900	.0910	.0820	.1570			.1700		.3250	.1030	.0140	.0230	.0370
90.000		1.2020	.6270	.1520	.0970	.1500			.1900		.1620	.0980	.0380	.0090	.0210
120.000			.6750	.2510	.2130	.2050			.2730		.1230	-.0340	.0020	.0250	.0160
142.000										.0790					
150.000			.6220	.2680	.3070	.3880			.0750		.0250	-.0330	-.0240	.0090	.0290
157.000								1.1040							
162.000									.9210						
165.000											-.0460	-.0440	-.0120	-.0040	.0280
169.000									.9250						
172.000							1.1800								

AMES 87-7U7 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB:3)

MACH (1) = 2.490 BETAT (4) = -2.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
180.000	1.6320	1.2820	.8090	.3240	.3290	.4280			1.2100		-.0620	-.0350	-.0270	-.0120	.0070
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0070							-.1560		-.1040					
40.000	.0350	.0280		.0620	.0100	-.0480	-.1030			-.1590					
70.000		-.0410	-.0230	-.0220	.0150	.0150	-.0030	.0100							
90.000		.0160	-.0060	.0420	.0560	.0580	.0280	.0140							
105.000				.1110	.0860	.0720	.0170	.0080							
110.000									.0660						
120.000		.0210	.0160	.3000	.1950	.0230	.0150	.0430	.0340						
135.000				.5070	.4160	.0230	.0430	.0770							
150.000		.0160	.0210	.1910	.3390	.0230	.0950	.1470							
165.000		.0160		.1730	.3460	.2490	.2160	.0680							
180.000		.0190	.0240	.0250											

MACH (1) = 2.490 BETAT (5) = 2.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.8480	.9450	.4430	.0180	.0360	.1840			.0870		.1920	.1750	.1240	.0660	-.0030
20.000			.4430	.0180	.0360	.1610			.1020		.1340				
40.000			.4710	.0340	.0350	.0630			.1550		.1030	.1140	.0810	.0180	.0180
55.000			.4680	.0370	.0250	.0600			.0990		.2230				
70.000			.4800	.0310	.0170	.0760			.0920		.1440	.0650	-.0170	.0040	.0170
90.000		1.0630	.4890	.0700	.0210	.0650			.1350		.1460	-.0380	.0170	-.0210	.0070
120.000			.5610	.1770	.1410	.1280			.1360		.0370	-.0800	-.0780	-.0110	.0040
142.000										.0190					
150.000			.6820	.2470	.2800	.3250			.7490		-.0210	-.0720	-.0500	-.0360	.0110
157.000								1.0290							
162.000									.8600						
165.000											-.0720	-.0690	-.0360	-.0180	-.0020
169.000									.9190						
172.000							1.1630								
180.000	1.8480	1.2880	.8040	.3210	.3240	.4230			1.1910		-.0620	-.0320	-.0290	-.0140	.0050
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0040							-.1630		-.1090					
40.000	-.0040	.0220		-.0060	-.0550	-.1010	-.1230			-.1150					

AMES 67-7U7 IA9 OEA + 33 + T9 ORBITER FUSELAGE (RBNBU3)

MACH (1) = 2.490 BETAT (5) = 2.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0010	-.0320	-.0300	.0030	-.0160	-.0380	-.0190		
90.000		.0190	-.0080	.0450	.0310	.0040	-.0260	-.0160		
105.000				.0750	.0280	.0040	-.0310	-.0220		
110.000									-.0160	
120.000		.0250	.0230	.1930	.1130	-.0010	-.0530	.0080	.0090	
135.000				.3980	.4090	-.0270	-.0250	.0280		
150.000		.0850	.0280	.2490	.4660	.0640	.0950	.0940		
165.000		.0240		.0840	.4010	.2650	.1650	.0840		
180.000		.0180	.0220	.0220						

MACH (1) = 2.480 BETAT (6) = 4.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6370	.9450	.4490	.0260	.0400	.2010			.1110		.1080	.1340	.0810	.0540	-.0090
20.000			.4420	.0220	.0420	.1720			.0860		.1020				
40.000			.4470	.0260	.0350	.0590			.0990		.0810	.1240	.0640	.0000	.0020
55.000			.4280	.0290	.0220	.0670			.0760		.1250				
70.000			.4110	.0310	.0100	.0580			.0780		.1000	.0030	-.0120	-.0030	.0110
90.000		1.1060	.4350	.0400	.0010	.0530			.0910		.0740	-.0480	-.0520	-.0160	.0020
120.000			.5160	.1460	.1150	.1150			.1310		.0690	-.0940	-.0950	-.0490	.0090
142.000										.0000					
150.000			.5890	.2340	.2440	.2910			.0860		-.0370	-.0850	-.0590	-.0410	-.0120
157.000								.9040							
162.000									.0520						
165.000											-.0820	-.0720	-.0390	-.0220	-.0330
189.000									.9200						
172.000							1.1020								
180.000	1.6370	1.2730	.8400	.5220	.3300	.4350			1.1770		-.0590	-.0350	-.0190	-.0160	-.0020

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0180							-.1570		-.2140
40.000	-.0150	.0100		-.0450	-.0730	-.1160	-.1390			-.1910
70.000		-.0010	-.0260	-.0260	.0040	-.0070	-.0360	-.0200		
90.000		.0190	-.0050	.0330	.0180	.0090	-.0220	-.0260		
105.000				.0580	.0420	.0090	-.0340	-.0320		
110.000									-.0220	
120.000		.0190	.0150	.2040	.0780	-.0900	-.0770	-.0210	-.0190	
135.000				.6510	.4020	-.0290	-.0360	-.0050		
150.000		.0220	.0210	.2180	.5400	.0800	.0740	.0650		

AMES 87-707 IA9 OEA + S3 + 79 ORBITER FUSELAGE (RBNB03)

MACH (1) = 2.498 BETAT (6) = 4.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0160		.0930	.5030	.2250	.1070	.0600		
180.000		-.0160	-.0100	.0700						

MACH (1) = 2.498 BETAT (7) = 6.440

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5125
PHI															
.000	1.0270	.9300	.4050	.1280	.0480	.2340			.1490		.0970	.0920	.0340	.0040	-.0270
20.000			.4040	.0170	.0340	.1980			.1010		.0890				
40.000			.3930	.0080	.0180	.0580			.0670		.0430	.1030	.0310	-.0250	-.0290
55.000			.3710	.0080	.0000	.0510			.0680		.0910				
70.000			.3540	-.0200	-.0110	.0240			.0610		.0830	-.0310	-.0360	-.0140	.0050
90.000		.9410	.3770	.0460	-.0260	.0220			.0490		-.0060	-.0690	-.0720	-.0260	-.0650
120.000			.4620	.1150	.0850	.0730			.0710		-.0290	-.1140	-.1160	-.0810	-.0460
142.000										-.0230					
150.000			.5510	.2120	.2250	.2930			.0370		-.0530	-.0970	-.0720	-.0530	-.0280
157.000								.9490							
162.000									.8280						
165.000											-.1060	-.0730	-.0470	-.0440	-.0730
169.000									.9120						
172.000							1.1140								
180.000	1.0870	1.2870	.5930	.3140	.3270	.4260			1.1670		-.0530	-.0500	-.0160	-.0110	-.0420

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0110							-.1700		-.1220
40.000	-.0220	.0010		-.0660	-.0980	-.1510	-.1590			-.1160
70.000		-.0010	-.0270	-.0280	-.0030	-.0140	-.0430	-.0350		
90.000		.0170	-.0080	.0250	.0150	-.0070	-.0370	-.0370		
105.000				.0590	-.0070	-.0160	-.0520	-.0420		
115.000									-.0220	
120.000		.0150	.0080	.1910	.0540	-.1130	-.0920	-.0570	-.0430	
135.000				.6450	.4080	-.0530	-.0670	-.0435		
150.000		-.0480	-.0470	.0930	.2750	.1030	.0640	.0490		
165.000		-.0650		.0950	.3460	.1100	.0620	.0170		
180.000		-.0680	-.0580	.0270						

AMES 87-707 IA9 CRA + S3 + T9 ORBITER FUSELAGE (RBNB03)

MACH (1) = 2.498 BETAT (8) = 8.570

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6170	.9370	.3700	.0160	.0520	.2840			.1270		.0720	.0890	.0280	.0000	-.0360
20.000			.3470	.0460	.0230	.2440			.1020		.0490				
40.000			.3490	-.0270	-.0460	.0690			.0310		-.0150	-.0190	-.0540	-.0500	-.0480
55.000			.3360	-.0310	-.0340	.0340			.0620		.0710				
70.000			.3110	-.0480	-.0380	-.0420			.0360		.0780	-.0480	-.0750	-.0350	.0000
90.000		.8850	.3270	-.0230	-.0490	-.0110			-.0030		-.0480	-.0970	-.0860	-.0550	-.0120
120.000			.4170	.0830	.0580	.0450			.0360		-.0620	-.1360	-.1410	-.1040	-.0360
142.000										-.0460					
150.000			.5170	.1950	.1990	.2430			.0720		-.0730	-.1120	-.0980	-.0540	-.0510
157.000								.8650							
162.000									.8110						
165.000											-.1250	-.0830	-.0590	-.0790	-.1020
169.000									.9000						
172.000							1.0480								
180.000	1.6170	1.2800	.5850	.3070	.3190	.4450			1.1540		-.0540	-.0540	-.0270	-.0230	-.0870

X/LB	.5873	.6626	.7380	.7769	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0200							-.1570		-.1320
40.000	-.0420	-.0070		-.0900	-.1070	-.1620	-.1690			-.1310
70.000		.0020	-.0290	-.0320	-.0460	-.0050	-.0360	-.0410		
90.000		.0060	-.0180	.0120	.0220	-.0070	-.0410	-.0490		
105.000				.0620	-.0030	-.0110	-.0550	-.0520		
115.000									-.0480	
120.000		-.0040	-.0110	.2020	.0310	-.1210	-.1130	-.0720	-.0600	
135.000				.3910	.3690	-.0640	-.0850	-.0680		
150.000		-.1060	-.0810	.0340	.0670	.0550	.0210	.0090		
165.000		-.1040		.0380	.1840	.0160	-.0130	-.0680		
180.000		-.1180	-.0780	-.0380						

MACH (2) = 2.999 BETAT (1) = -8.570

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0070	.0310	.0970			.1720		.1220	.0870	.0840	.0240	.0040
20.000			.5010	.0450	.0410	.1120			.3130		.1290				
40.000			.6830	.1500	.0860	.1540			.3760		.1880	.1240	.0570	.0630	.0580
55.000			.7600	.2420	.1900	.2480			.2930		.3920				
70.000			.8420	.2750	.2170	.2250			.2690		.4580	.2280	.1190	.1180	.1060
90.000		.0000	.8870	.3220	.2380	.2490			.2710		.2800	.2110	.1410	.1010	.0910
120.000			.8840	.3880	.3350	.3710			.5010		.2550	.0750	.0780	.1010	.0660

AMES 87-707 IA9 C8A + S3 + T9 ORBITER FUSELAGE (RBNB03)

MACH (2) = 2.999 BETAT (1) = -8.570

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
142.000										.2290					
150.000			.8160	.3590	.3580	.4410			1.0960		.0950	.0760	.0510	.0650	.0510
157.000								1.2580							
162.000									1.1540						
165.000											.0500	.0560	.0620	.0480	.0600
169.000									1.0450						
172.000							1.1530								
180.000	.0000	.0000	.6260	.3260	.3150	.4190			1.3150		-.0060	-.0140	-.0030	-.0350	-.0580

X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0260							-.1120		-.1140
40.000	.1270	.1110		.2290	.1840	.1190	.0470			-.0880
70.000		.0410	.0030	.0090	.0600	.0830	.0610	.0610		
90.000		.0600	.0270	.0380	.1000	.1390	.1240	.0940		
105.000				.1460	.1390	.1870	.1240	.0870		
115.000									.0900	
120.000		.0520	.0400	.4290	.3240	.1570	.1210	.1160	.1000	
135.000				.4570	.4290	.0390	.0310	.0590		
150.000		.0410	.0370	.1300	.2060	-.0160	.0130	.1010		
165.000		.0480		.1350	.2540	.1630	.2250	.1290		
180.000		-.0900	-.0780	-.0490						

MACH (2) = 2.999 BETAT (2) = -6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	.0040	.0050	.1240			.1500		.0970	.1050	.1100	.0290	-.0160
20.000			.4770	.0340	.0230	.1060			.2260		.1330				
40.000			.6320	.1230	.0660	.1460			.1590		.1790	.1130	.0570	.0480	.0430
55.000			.6710	.1980	.1470	.2110			.2230		.3730				
70.000			.7710	.2270	.1740	.1920			.2120		.3450	.2010	.0960	.0910	.0830
90.000		.0070	.8180	.2730	.1960	.2070			.2330		.2180	.1150	.1200	.0760	.0680
120.000			.8300	.3490	.2980	.3230			.4150		.2140	.0440	.0210	.0810	.0490
142.000										.1920					
150.000			.7890	.3410	.3420	.4160			1.0380		.0780	.0460	.0270	.0270	.0350
157.000								1.2310							
162.000									1.1110						
165.000											.0320	.0270	.0390	.0170	.0430
169.000									1.0420						
172.000							1.1740								

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AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB03)

MACH (2) = 2.999 BETAT (2) = -6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	.0000	.0000	.6270	.3300	.3180	.4140			1.3380		-.0130	-.0140	-.0130	-.0070	-.0210

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0290							-.1130		-.1090
40.000	.0850	.0680		.1800	.1360	.0750	.0230			-.0930
75.000		.0230	-.0120	-.0190	.0260	.0550	.0320	.0370		
90.000		.0390	.0080	.0140	.0620	.1050	.0920	.0680		
105.000				.1140	.1050	.1460	.0980	.0610		
110.000									.0650	
120.000		.0390	.0250	.4120	.2740	.0680	.0850	.0890	.0810	
135.000				.4710	.4130	.0270	.0190	.0390		
150.000		.0310	.0270	.1250	.2130	-.0090	.0220	.0950		
165.000		.0350		.1220	.2480	.1970	.2190	.1260		
180.000		-.0530	-.0590	.0020						

MACH (2) = 2.999 BETAT (3) = -4.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0020	.0080	.1460			.1230		.0450	.1070	.0910	.0360	.0130
25.000			.4550	.0220	.0060	.1060			.1860		.1130				
40.000			.5860	.0920	.0450	.1420			.1260		.1780	.0990	.0630	.0370	.0260
55.000			.6320	.1560	.1100	.1620			.1710		.3350				
70.000			.6990	.1830	.1300	.1440			.1610		.2120	.1690	.0830	.0690	.0640
90.000		.0000	.7490	.2290	.1530	.1580			.1710		.1650	.0490	.0840	.0600	.0500
120.000			.7810	.3130	.2600	.2770			.3670		.1730	.0180	.0040	.0480	.0360
142.000										.1550					
150.000			.7600	.3250	.3220	.3840			.9720		.0630	.0260	.0080	.0050	.0220
157.000								1.1760							
162.000									1.0720						
165.000											.0170	.0020	.0170	.0040	.0190
169.000									1.0400						
172.000							1.1590								
180.000	.0000	.0000	.6350	.3310	.3180	.4220			1.3500		-.0180	-.0140	-.0070	-.0050	-.0170

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0080							-.1040		-.1100
40.000	.0810	.0490		.1390	.0880	.0370	-.0090			-.1050

AMES 87-7U7 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU3)

MACH (2) = 2.999 BETAT (3) = -4.26U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6828	.7580	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		.0050	-.0290	-.0250	.0070	.0290	.0150	.0240		
90.000		.0190	-.0110	-.0430	.0360	.0790	.0710	.0560		
105.000				.0960	.0760	.0950	.0680	.0410		
110.000									.0860	
120.000		.0280	.0170	.3580	.2310	.0350	.0350	.0640	.0620	
135.000				.4730	.4040	.0190	.0130	.0260		
150.000		.0230	.0190	.1270	.2420	.0030	.0390	.0920		
165.000		.0240		.1160	.2620	.2150	.2200	.1130		
180.000		-.0140	-.0280	.0510						

MACH (2) = 2.999 BETAT (4) = -2.100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	.0000	.0010	.0000	.0010	.0020	.2070			.1100		.0270	.1360	.1130	.0850	.0240
20.000			.4390	.0150	-.0090	.1090			.1440		.0570				
40.000			.5430	.0710	.0130	.1270			.1140		.1760	.0870	.0610	.0390	.0350
55.000			.5630	.1210	.0770	.1240			.1340		.2070				
70.000			.6320	.1410	.0950	.1070			.1200		.1700	.0710	.0600	.0480	.0480
90.000		.0000	.6820	.1850	.1170	.1140			.1320		.1180	.0140	.0240	.0460	.0330
120.000			.7270	.2770	.2270	.2190			.2990		.1330	-.0070	-.0160	-.0030	.0260
142.000										.1240					
150.000			.7350	.3080	.3060	.3630			.9130		.0450	.0420	-.0080	-.0050	.0060
157.000								1.1600							
162.000									1.0430						
165.000											.0040	-.0180	.0010	.0000	-.0060
169.000									1.0440						
172.000							1.2020								
180.000	.0000	.0000	.6400	.3350	.3250	.3870			1.3610		-.0240	-.0080	-.0030	-.0030	-.0120

X/LB	.5873	.6828	.7580	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0080									
40.000	.0490	.0300		.0890	.0530	-.0160	-.0460	-.1160	-.1100	
70.000		-.0080	-.0370	-.0340	-.0080	.0040	-.0100	.0040	-.1180	
90.000		.0100	-.0200	-.0090	.0160	.0470	.0350	.0290		
105.000				.0030	.0490	.0460	.0310	.0220		
110.000										
120.000		.0210	.0120	.2980	.1910	.0600	-.0140	.0410	.0620	
135.000				.4530	.4000	.0040	.0000	.0250	.0450	
150.000		.0200	.0160	.1390	.2790	.0150	.0470	.1000		

AMES 87-7U7 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU3)

MACH (2) = 2.999 BETAT (4) = -2.1U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.UU		.U18U		.132U	.262U	.212U	.198U	.1U2U		
18U.UU		-.U42U	.UU2U	.U12U						

MACH (2) = 2.999 BETAT (5) = 2.22U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.U075	.U168	.U339	.U6U2	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.32U4	.3953	.512U
PHI															
.UUU	.UUUU	.UUUU	.UUUU	.U24U	.U16U	.U92U			.114U		.U31U	.138U	.114U	.U99U	.U25U
2U.UUU			.4U5U	.U17U	.UU2U	.U67U			.1U5U		.U33U				
4U.UUU			.463U	.U28U	.U46U	.U57U			.U69U		.U65U	.U82U	.U68U	.U34U	.U11U
55.UUU			.469U	.U53U	.U19U	.U57U			.U62U		.1UUU				
7U.UUU			.494U	.U66U	.U31U	.U53U			.U52U		.U4U	-.UU5U	.UU3U	.U16U	.U27U
9U.UUU		.UUUU	.534U	.1U1U	.U5U	.U53U			.U92U		.U22U	-.U48U	-.U5U	-.U4U	.U15U
12U.UUU			.599U	.2UU	.158U	.14U			.145U		.U58U	-.U5U	-.U55U	-.U57U	-.UU1U
142.UU										.U71U					
15U.UU			.651U	.264U	.262U	.315U			.776U		.U17U	-.U39U	-.U34U	-.U25U	-.U3U
157.UU								1.U95U							
162.UU									.99UU						
165.UU											-.U29U	-.U4U	-.U21U	-.U8U	-.U17U
169.UU									1.U35U						
172.UU							1.187U								
18U.UU	.UUUU	.UUUU	.636U	.33U	.323U	.38U			1.352U		-.U34U	-.U15U	-.UU1U	-.UU4U	-.U1U

X/LB	.5873	.6626	.7380	.7669	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.UUU	-.U1UU							-.137U		-.1U6U
4U.UUU	.U14U	-.U11U		.U4UU	-.U26U	-.U75U	-.U88U			-.129U
7U.UUU		-.U15U	-.U4UU	-.U38U	-.U1UU	-.U18U	-.U38U	-.U17U		
9U.UUU		.UU6U	-.U15U	.U23U	.U31U	.UUU	-.U21U	-.U6U		
1U5.UUU				.U67U	.U3UU	.UU2U	-.U21U	-.UU7U		
11U.UUU									.U26U	
12U.UUU		.U13U	.UU8U	.139U	.12UU	-.U52U	-.U56U	.UUU	.U19U	
135.UUU				.537U	.395U	-.U17U	-.U13U	.U29U		
15U.UUU		.U4U	.U17U	.2U9U	.437U	.U5UU	.U71U	.U83U		
165.UUU		-.U14U		.U51U	.269U	.251U	.14UU	.U98U		
18U.UUU		-.U42U	.UU2U	.UU9U						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB:3)

MACH (2) = 2.999 BETAT (6) = 4.390

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0050	.0060	.1880			.1240		.0540	.1200	.0910	.0400	.0150
20.000			.3950	.0000	-.0020	.1670			.1130		.0250				
40.000			.4320	.0160	-.0120	.0640			.1170		.0230	.0360	.1060	.0300	.0020
55.000			.4330	.0320	-.0010	.0370			.0440		.1010				
70.000			.4390	.0420	.0070	.0340			.0370		.0600	-.0110	-.0440	.0110	.0170
90.000		.0000	.4710	.0720	.0220	.0260			.0540		-.0120	-.0710	-.0680	-.0410	.0040
120.000			.5450	.1710	.1290	.1310			.1360		.0230	-.0670	-.0670	-.0660	-.0260
142.000										.0540					
150.000			.6130	.2470	.2400	.2680			.7070		-.0050	-.0570	-.0410	-.0310	-.0300
157.000								.9700							
162.000									.9820						
165.000											-.0470	-.0520	-.0200	-.0120	-.0290
169.000									1.0310						
172.000							1.1300								
180.000	.0000	.0000	.6300	.3260	.3190	.3930			1.3340		-.0320	-.0200	-.0010	-.0040	-.0140

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0030							-.1100		-.1070
40.000	.0010	-.0190		.0000	-.0330	-.0490	-.0820			-.1260
70.000		-.0110	-.0340	-.0320	-.0100	.0100	-.0140	-.0190		
90.000		.0090	-.0050	.0240	.0300	.0180	-.0010	-.0080		
105.000				.0590	.0170	.0170	-.0040	-.0130		
110.000									.0370	
120.000		.0120	.0100	.1390	.0950	-.0360	-.0400	-.0210	-.0020	
135.000				.6200	.3890	.0080	-.0050	.0080		
150.000		-.0160	.0000	.1360	.5700	.0780	.0810	.0550		
165.000		-.0090		.0560	.3220	.1800	.0850	.0620		
180.000		-.0120	-.0210	.0480						

MACH (2) = 2.999 BETAT (7) = 6.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0110	.0270	.1240			.1450		.1170	.1160	.0990	.0310	-.0095
20.000			.3850	.0030	.0210	.1390			.1030		.0480				
40.000			.4060	.0060	-.0040	.0280			.0740		.0630	.0480	.0430	.0020	-.0150
55.000			.4030	.0140	-.0110	.0210			.0340		.0760				
70.000			.3900	.0190	-.0120	.0220			.0250		.0560	-.0170	-.0500	-.0080	.0060
90.000		.0000	.4160	.0470	.0010	.0130			.0140		-.0310	-.0800	-.0710	-.0590	-.0130
120.000			.4980	.1430	.1020	.0920			.0920		.0010	-.0740	-.0820	-.0800	-.0520

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB03)

MACH (2) = 2.999 BETAT (7) = 6.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0260					
150.000			.5790	.2300	.2250	.2570			.6550		-.0690	-.0650	-.0490	-.0390	-.0330
157.000								.9000							
162.000									.9560						
165.000											-.0600	-.0460	-.0230	-.0240	-.0530
169.000									1.0230						
172.000							1.0940								
180.000	.0000	.0000	.6240	.3220	.3190	.3630			1.3210		-.0170	-.0210	-.0090	-.0060	-.0260

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0330							-.1160		-.1100
40.000	-.0210	-.0300		-.0240	-.0630	-.0740	-.1080			-.0920
70.000		-.0090	-.0360	-.0290	-.0120	.0080	-.0170	-.0240		
90.000		.0420	-.0110	.0110	.0200	.0090	-.0090	-.0210		
105.000				.0600	.0110	-.0020	-.0240	-.0280		
115.000									.0180	
120.000		.0440	.0010	.1290	.0650	-.0480	-.0600	-.0430	-.0310	
135.000				.5140	.3830	-.0150	-.0280	-.0210		
150.000		-.0440	-.0520	.0410	.2470	.1015	.0730	.0400		
165.000		-.0590		.0650	.2520	.0770	.0420	.0000		
180.000		-.0580	-.0620	.0010						

MACH (2) = 2.999 BETAT (8) = 8.790

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0050	.0090	.1310			.1650		.0970	.0930	.0920	.0210	.0150
20.000			.3720	-.0060	-.0030	.1280			.1160		.0670				
40.000			.3780	-.0110	-.0230	.0570			.0580		-.0140	.0040	-.0260	-.0610	-.0420
55.000			.3760	-.0070	-.0210	.0020			.0290		.0640				
70.000			.3410	-.0460	-.0280	.0430			.0160		.0460	-.0240	-.0320	-.0350	-.0050
90.000		.0000	.3610	.0150	-.0200	-.0100			-.0240		-.0520	-.0900	-.0620	-.0770	-.0330
120.000			.4460	.1130	.0800	.0700			.0590		-.0180	-.0060	-.0970	-.0900	-.0650
142.000										.0120					
150.000			.5390	.2100	.2060	.2450			.5900		-.0210	-.0710	-.0620	-.0460	-.0390
157.000								.9030							
162.000									.9440						
165.000											-.0750	-.0460	-.0310	-.0520	-.0700
169.000									1.0150						
172.000							1.0280								

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RANBUS)

MACH (2) = 2.999 BETAT (8) = 8.730

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	.0000	.0000	.6140	.3140	.3120	.3960			1.3000		-.0100	-.0140	-.0160	-.0200	-.0660
X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0275							-.1460		-.1190					
40.000	-.0390	-.0350		-.0280	-.0820	-.1080	-.1440			-.0940					
70.000		-.0150	-.0330	-.0260	-.0270	.0010	-.0290	-.0230							
90.000		-.0180	-.0270	-.0270	.0180	-.0240	-.0490	-.0340							
105.000				.0440	.0120	-.0320	-.0560	-.0320							
110.000									-.0140						
125.000		-.0180	-.0220	.1190	.0270	-.0900	-.0860	-.0450	-.0380						
135.000				.2540	.2810	-.0650	-.0890	-.0670							
150.000		-.0780	-.0780	.0160	.1980	.0560	-.0010	.0420							
165.000		-.0770		.0210	.1020	-.1490	-.0400	-.0510							
180.000		-.0850	-.0830	-.0500											

MACH (3) = 3.502 BETAT (1) = -8.730

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0340	.0680	.1050			.1910		.1340	.0980	.0820	.0460	.0310
20.000			.5240	.0640	.0040	.1000			.1690		.1830				
40.000			.7210	.1710	.0960	.2060			.1160		.2540	.1510	.0830	.0520	.0670
55.000			.7800	.2660	.2050	.1870			.2420		.4300				
70.000			.9160	.3110	.2350	.2240			.2320		.2910	.2500	.1560	.1360	.1200
90.000		.0000	.9800	.3660	.2610	.2550			.2540		.2640	.1180	.1590	.1280	.1000
120.000			.9690	.4240	.3570	.3870			.5110		.2690	.1900	.0550	.0830	.0700
142.000										.2640					
150.000			.8810	.3900	.3710	.4490			1.1500		.1090	.0670	.0510	.0450	.0430
157.000								1.3470							
180.000									1.2600						
185.000											.0690	.0530	.0660	.0330	.0540
189.000									1.1570						
172.000							1.2050								
180.000	.0000	.0000	.6710	.3480	.3230	.3880			1.4340		.0020	-.0010	.0030	-.0390	-.0430
X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0050							-.0780		-.0830					
40.000	.0510	.1050		.2340	.1910	.1140	.0800			-.0490					

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB03)

MACH (3) = 3.502 BETAT (1) = -8.730

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		.0450	.0080	.0120	.0450	.0800	.0610	.0590		
90.000		.0620	.0270	.0340	.0860	.1190	.1260	.1180		
105.000				.1370	.1360	.1630	.1470	.1150		
110.000									.1250	
120.000		.0490	.0350	.4290	.3650	.1130	.1080	.1300	.1240	
135.000				.4410	.4480	.0520	.0340	.0450		
150.000		.0440	.0410	.1300	.2000	-.0040	.0140	.0640		
165.000		.0580		.1320	.2230	.1450	.2080	.1230		
180.000		-.0730	-.0840	-.0540						

MACH (3) = 3.502 BETAT (2) = -6.530

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5125
PHI															
.000	.0000	.0000	.0000	.0290	.0280	.1010			.1630		.0810	.1070	.0810	.0550	.0195
20.000			.5000	.0520	.0350	.0900			.1370		.1750				
40.000			.6690	.1390	.0700	.1890			.1080		.2660	.1360	.0830	.0530	.0480
55.000			.7180	.2220	.1600	.1670			.2030		.2460				
70.000			.8360	.2610	.1880	.1790			.1870		.2340	.1390	.1280	.1080	.0960
90.000		.0000	.8970	.3130	.2150	.2140			.2140		.2090	.0790	.0720	.1140	.0780
125.000			.9080	.3830	.3150	.3360			.4330		.2170	.0630	.0310	.0440	.0550
142.000										.2230					
150.000			.8560	.3710	.3550	.4200			1.1060		.0680	.0480	.0300	.0280	.0270
157.000								1.3180							
162.000									1.2180						
185.000											.0580	.0230	.0380	.0270	.0240
169.000									1.1560						
172.000							1.2340								
180.000	.0000	.0000	.6810	.3500	.3260	.3900			1.4640		-.0020	-.0060	.0010	-.0150	-.0290

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0110							-.0770		-.0660
40.000	.0320	.0690		.1770	.1400	.0830	.0480			-.0620
70.000		.0320	-.0070	-.0050	.0190	.0500	.0360	.0350		
90.000		.0450	.0130	.0150	.0550	.0900	.0990	.0850		
105.000				.1070	.1000	.1150	.1010	.0820		
110.000									.0940	
120.000		.0370	.0270	.4130	.3050	.0810	.0570	.0970	.0960	
135.000				.4410	.4270	.0410	.0250	.0360		
150.000		.0320	.0290	.1190	.2160	-.0040	.0130	.0520		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU3)

MACH (3) = 3.502 BETAT (2) = -6.53

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.3873	.8828	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
103.000		.0390		.1120	.2210	.1610	.2010	.1210		
180.000		-.0450	-.0480	-.0120						

MACH (3) = 3.502 BETAT (3) = -4.34

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0240	.0130	.0980			.1460		.0540	.0780	.0920	.0470	.0230
20.000			.4710	.0390	.0120	.0970			.1590		.0980				
40.000			.6160	.1110	.0420	.1250			.1530		.2620	.1250	.0660	.0470	.0320
55.000			.6640	.1840	.1210	.1210			.1520		.1730				
70.000			.7580	.2120	.1460	.1350			.1370		.1760	.0830	.0930	.0830	.0720
90.000		.0000	.8170	.2590	.1700	.1710			.1660		.1540	.0420	.0190	.0790	.0550
125.000			.8440	.3420	.2740	.2850			.3700		.1730	.0320	.0060	.0110	.0350
142.000										.1820					
150.000			.8180	.3510	.3320	.3870			1.0120		.0660	.0250	.0070	.0090	.0050
157.000								1.2690							
162.000									1.1740						
165.000											.0380	.0000	.0190	.0130	.0010
180.000									1.1490						
172.000							1.2330								
180.000	.0000	.0000	.6820	.3590	.3280	.3870			1.4820		-.0140	-.0150	.0000	-.0070	-.0170

X/LB	.3873	.8828	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0080							-.0780		-.1840
40.000	.0150	.0450		.1300	.1080	.0480	.0610			-.0780
70.000		.0150	-.0180	-.0190	-.0130	.0270	.0120	.0140		
90.000		.0270	-.0420	-.0010	.0320	.0630	.0680	.0570		
105.000				.0910	.0730	.0790	.0680	.0590		
110.000									.0710	
120.000		.0290	.0190	.3820	.2560	.0540	.0340	.0550	.0660	
135.000				.4590	.4080	.0350	.0140	.0230		
150.000		.0280	.0200	.1110	.2260	.0630	.0170	.0560		
165.000		.0080		.0940	.2160	.1090	.2040	.1240		
180.000		-.0100	-.0180	.0320						

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB03)

MACH (3) = 3.502 BETAT (4) = -2.140

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0200	-.0040	.0940			.1300		.0470	.0640	.1220	.0540	.0450
20.000			.4520	.0290	-.0060	.0650			.1530		.0700				
40.000			.5690	.0820	.0210	.1150			.0890		.1220	.1130	.0470	.0450	.0410
55.000			.5910	.1380	.0860	.0990			.1210		.1240				
70.000			.6810	.1660	.1070	.1010			.1060		.1370	.0530	.0190	.0590	.0300
90.000		.0000	.7370	.2130	.1320	.1270			.1160		.1190	.0110	-.0070	.0360	.0360
120.000			.7780	.2980	.2370	.2320			.3100		.1320	.0050	-.0110	-.0110	.0180
142.000										.1530					
150.000			.7780	.3290	.3110	.3640			.9450		.0480	.0030	-.0110	-.0040	-.0110
157.000								1.2300							
162.000									1.1430						
165.000											.0190	-.0180	-.0050	.0010	-.0060
169.000									1.1420						
172.000							1.2450								
180.000	.0000	.0000	.6790	.3480	.3300	.3810			1.4850		-.0230	-.0180	.0040	-.0060	-.0060

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0130							-.0780		-.0650
40.000	.0180	.0420		.1000	.0540	.0070	-.0120			-.0660
70.000		.0030	-.0290	-.0290	-.0080	.0010	-.0030	.0000		
90.000		.0130	-.0110	-.0100	.0140	.0450	.0450	.0320		
105.000				.0600	.0560	.0480	.0350	.0260		
110.000									.0580	
120.000		.0180	.0150	.0230	.0180	.0490	.0110	.0160	.0380	
135.000				.0170	.0980	.0260	.0120	.0210		
150.000		.0170	.0170	.0160	.0390	.0190	.0240	.0650		
165.000		.0150		.0230	.0170	.0840	.0750	.0930		
180.000		-.0060	-.0050	.0060						

MACH (3) = 3.902 BETAT (5) = 2.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0230	.0240	.0820			.1270		.0410	.0510	.1010	.0610	.0490
20.000			.4180	.0170	.0230	.0660			.1160		.0300				
40.000			.4880	.0450	.0070	.0600			.0800		.0440	.0590	.0660	.0460	.0240
55.000			.5020	.0770	.0320	.0540			.0540		.0680				
70.000			.5380	.0940	.0450	.0620			.0230		.0650	-.0030	-.0290	.0150	.0190
90.000		.0000	.5810	.1300	.0670	.0740			.0530		.0330	-.0320	-.0410	-.0380	.0040
120.000			.6500	.2260	.1710	.1630			.1680		.0750	-.0260	-.0390	-.0470	-.0300

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU3)

MACH (3) = 3.502 BETAT (5) = 2.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1030					
150.000			.0990	.2880	.2710	.3180			.8010		.0370	-.0210	-.0320	-.0190	-.0230
157.000								1.1820							
162.000									1.0880						
165.000											-.0240	-.0310	-.0230	-.0080	-.0120
169.000									1.1240						
172.000							1.2670								
180.000	.0000	.0000	.6790	.3490	.3290	.3840			1.4630		-.0220	-.0110	.0080	-.0040	-.0050
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0150							-.0770		-.0890					
40.000	.0200	.0110		.0360	-.0060	-.0340	-.0410			-.0970					
70.000		-.0120	-.0360	-.0310	-.0240	.0040	-.0060	-.0140							
90.000		.0070	-.0120	-.0030	.0320	.0170	.0060	-.0020							
105.000				.0720	.0380	.0210	.0020	-.0080							
110.000									.0140						
120.000		.0110	.0080	.1090	.1510	-.0160	-.0250	-.0140	.0000						
135.000				.4900	.3780	.0130	.0040	.0130							
150.000		-.0120	.0020	.1580	.3960	.0720	.0410	.0550							
165.000		-.0160		.0220	.2080	.2330	.1330	.0880							
180.000		-.0050	-.0080	.0030											

MACH (3) = 3.502 BETAT (6) = 4.470

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0260	.0280	.0910			.1390		.0550	.0830	.0780	.0500	.0270
20.000			.4090	.0170	.0280	.0720			.1210		.0370				
40.000			.4550	.0320	.0080	.0670			.0620		.0320	.0130	.0490	.0420	.0220
55.000			.4580	.0510	.0170	.0480			.0510		.0540				
70.000			.4740	.0630	.0260	.0500			.0690		.0510	-.0170	-.0450	-.0120	.0110
90.000		.0000	.5110	.0940	.0440	.0490			.0680		-.0070	-.0570	-.0590	-.0510	-.0160
120.000			.5890	.1900	.1440	.1420			.1310		.0380	-.0460	-.0530	-.0590	-.0520
142.000										.0810					
150.000			.6570	.2660	.2510	.2990			.7290		.0180	-.0440	-.0490	-.0270	-.0290
157.000								1.1170							
162.000									1.0740						
165.000											-.0270	-.0450	-.0200	-.0120	-.0210
169.000									1.1220						
172.000							1.2060								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB03)

MACH (3) = 3.502 BETAT (6) = 4.47

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	.0000	.0000	.0750	.3420	.3290	.3820			1.4600		-.0250	-.0150	.0020	-.0080	-.0190
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0070							-.0830		-.0890					
40.000	-.0010	-.0150		.0030	-.0260	-.0390	-.0630			-.1010					
70.000		-.0250	-.0400	-.0360	-.0250	.0050	-.0130	-.0210							
90.000		-.0050	-.0170	.0040	.0140	.0120	-.0030	-.0110							
105.000				.0430	.0030	.0010	-.0110	-.0150							
110.000									.0270						
120.000		-.0020	-.0050	.1090	.0860	-.0330	-.0350	-.0300	-.0210						
135.000				.5670	.3490	.0030	-.0110	-.0040							
150.000		-.0240	-.0210	.0950	.4610	.0710	.0450	.0260							
165.000		-.0360		.0650	.2360	.1330	.0570	.0410							
180.000		-.0150	-.0190	.0330											

MACH (3) = 3.502 BETAT (7) = 6.68

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0300	.0300	.0940			.1590		.0750	.0120	.0700	.0470	.0130
25.000			.3950	.0150	.0270	.0870			.1140		.0380				
40.000			.4210	.0200	-.0100	.0490			.0520		.0110	-.0040	.0210	-.0130	-.0290
55.000			.4230	.0310	-.0020	.0260			.0320		.0440				
70.000			.4150	.0370	.0050	.0280			-.0060		.0150	-.0350	-.0500	-.0300	.0000
90.000		.0000	.4480	.0660	.0190	.0240			-.0080		-.0320	-.0740	-.0710	-.0670	-.0330
120.000			.5300	.1590	.1150	.1080			.0910		.0130	-.0580	-.0640	-.0720	-.0670
142.000										.0530					
150.000			.6140	.2440	.2280	.2700			.0590		.0060	-.0560	-.0470	-.0370	-.0280
157.000								1.0480							
162.000									1.0540						
165.000											-.0490	-.0480	-.0200	-.0260	-.0420
169.000									1.1070						
172.000							1.1230								
180.000	.0000	.0000	.6670	.3370	.3190	.3740			1.4380		-.0180	-.0160	-.0070	-.0170	-.0340
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0170							-.0880		-.0940					
40.000	-.0350	-.0340		-.0220	-.0410	-.0420	-.0650			-.0970					

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB03)

MACH (5) = 3.502 BETAT (7) = 6.68

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0230	-.0460	-.0360	-.0320	.0100	-.0130	-.0220		
90.000		-.0210	-.0260	-.0180	.0080	.0020	-.0120	-.0180		
105.000				.0330	.0030	-.0060	-.0220	-.0240		
110.000									-.0050	
120.000		-.0200	-.0150	.0890	.0460	-.0490	-.0420	-.0340	-.0240	
135.000				.3910	.2900	-.0160	-.0290	-.0330		
150.000		-.0350	-.0470	.0340	.2090	.0780	.0480	.0210		
165.000		-.0470		.0130	.1180	.0560	.0220	-.0140		
180.000		-.0510	-.0540	-.0180						

MACH (3) = 3.502 BETAT (8) = 8.89

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3216	.3953	.5125
PHI															
.000	.0000	.0000	.0000	.0280	.0680	.0980			.1780		.1270	.0850	.0610	.0440	.0210
20.000			.3820	.0130	.0050	.0740			.1170		.0440				
40.000			.3920	.0090	-.0280	.0370			.0500		-.0130	-.0250	-.0450	-.0510	-.0550
55.000			.3890	.0150	-.0160	.0070			.0190		.0330				
70.000			.3620	.0120	-.0110	.0090			-.0690		-.0670	-.0510	-.0640	-.0350	-.0310
90.000		.0000	.3870	.0360	.0000	.0020			-.0290		-.0520	-.0850	-.0850	-.0730	-.0470
120.000			.4740	.1250	.0880	.0780			.0670		-.0120	-.0730	-.0770	-.0780	-.0760
142.000										.0340					
150.000			.5070	.2230	.2090	.2350			.5860		-.0120	-.0690	-.0540	-.0440	-.0320
157.000								.9620							
162.000									1.0310						
165.000											-.0650	-.0550	-.0260	-.0440	-.0610
169.000									1.0830						
172.000							1.0410								
180.000	.0000	.0000	.6540	.3250	.3120	.3590			1.4030		-.0150	-.0170	-.0120	-.0450	-.0550

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0670							-.0910		-.0930
40.000	-.0580	-.0520		.0050	-.0530	-.0710	-.0880			-.0910
70.000		-.0270	-.0410	-.0290	-.0280	.0250	-.0050	-.0180		
90.000		-.0370	-.0430	-.0370	-.0020	-.0110	-.0240	-.0340		
105.000				.0140	-.0080	-.0170	-.0330	-.0320		
110.000									-.0640	
120.000		-.0330	-.0310	.0890	.0160	-.0530	-.0530	-.0450	-.0380	
135.000				.1960	.2060	-.0490	-.0600	-.0610		
150.000		-.0820	-.0680	-.0190	.0570	.0530	.0180	-.0630		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB:3)

MACH (3) = 3.502 BETAT (8) = 8.89

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0630		-.0320	.0630	.0110	-.0180	-.0480		
180.000		-.0830	-.0750	-.0570						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU4) (19 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

MACH (1) = 2.498 BETAT (1) = -8.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5620	.9080	.3770	.0170	.0460	.3140			.1380		.0680	.0710	.0160	-.0150	-.0530
20.000			.4650	.0390	.0520	.3800			.1880		.0790				
40.000			.6410	.1300	.1230	.3560			.2520		.1210	.0530	.0420	.0190	.0680
55.000			.7260	.2190	.1750	.5340			.4220		.3160				
70.000			.7720	.2420	.2440	.2910			.5060		.3970	.1490	.0490	.0610	.0750
90.000		1.3360	.7890	.2760	.2160	.2970			.4170		.4260	.1370	.0610	.0440	.0520
125.000			.7780	.3300	.2990	.3530			.4950		.3150	.0900	.0500	.0420	.0290
142.000										.1710					
150.000			.7150	.3000	.3210	.4070			.9680		.0510	.0260	.0510	.0500	.0160
157.000								1.1210							
162.000									.9650						
165.000											-.0250	.0210	.0700	.0600	.0240
169.000									.8510						
172.000							1.0470								
180.000	1.5620	1.1710	.5410	.2740	.2740	.3980			1.1850		-.0790	-.0770	-.0410	-.0890	-.1110

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0240							-.1500		-.1360
40.000	.1190	.0690		.2210	.1330	.0850	-.0280			-.1340
70.000		.0140	-.0060	.0040	.0580	.0600	.0300	.0380		
90.000		.0310	.0070	.0680	.1250	.1060	.0650	.0450		
105.000				.1620	.1860	.1360	.0630	.0340		
110.000									.0240	
125.000		.0220	.0090	.3830	.3330	.0980	.0680	.0600	.0490	
135.000				.3690	.3670	.0060	-.0120	.0090		
150.000		.0080	.0000	.1010	.1430	-.0720	.0040	.0880		
165.000		.0120		.1230	.2210	.1460	.2030	.0950		
180.000		-.1410	-.0970	-.0480						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB04)

MACH (1) = 2.498 BETAT (2) = -6.31

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5720	.9200	.4370	.0220	.0480	.2180			.1460		.0860	.0930	.0340	.0050	-.0410
20.000			.4870	.0190	.0650	.2850			.1920		.0790				
40.000			.6080	.1230	.1010	.3230			.2540		.1110	.0530	.0320	.0030	.0530
55.000			.6710	.1250	.1510	.2650			.3880		.2910				
70.000			.7050	.1960	.1640	.2430			.3450		.3680	.1390	.0380	.0420	.0500
90.000		1.2790	.7290	.2290	.1720	.2450			.3070		.3790	.1310	.0530	.0280	.0320
120.000			.7310	.2930	.2620	.3010			.4110		.2030	.0720	.0490	.0280	.0150
142.000										.1330					
150.000			.6900	.2810	.2990	.3820			.9150		.0450	.0040	.0230	.0320	.0130
157.000								1.0910							
162.000									.9260						
165.000											-.0310	-.0030	.0160	.0470	.0160
169.000									.8520						
172.000							1.0630								
180.000	1.5720	1.1800	.5420	.2770	.2750	.3920			1.1010		-.0720	-.0660	-.0370	-.0230	-.0720

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.1490		-.1270
40.000	.0970	.0680		.1750	.0970	.0450	-.0390			-.1440
70.000		-.0040	-.0250	-.0190	.0330	.0400	.0140	.0170		
90.000		.0130	-.0100	.0430	.0850	.0840	.0440	.0260		
105.000				.1140	.1360	.1080	.0430	.0170		
110.000									.0690	
120.000		.0130	.0020	.3410	.2550	.0750	.0490	.0440	.0340	
135.000				.3980	.3570	-.0070	-.0080	.0160		
150.000		-.0010	-.0070	.1050	.1730	-.0490	.0180	.0840		
165.000		.0030		.1160	.2360	.1800	.1920	.0840		
180.000		-.0920	-.0770	.0080						

MACH (1) = 2.498 BETAT (3) = -4.19

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5600	.9120	.4310	.0100	.0220	.1180			.1180		.1120	.1090	.0620	.0380	-.0340
20.000			.4770	.0410	.0410	.0350			.2030		.0910				
40.000			.5730	.1080	.0650	.0260			.2580		.0980	.0540	.0110	.0030	.0580
55.000			.6110	.1440	.0690	.1500			.3380		.2640				
70.000			.6380	.1480	.0670	.1470			.2140		.3380	.1090	.0130	.0230	.0250
90.000		1.2200	.6630	.1840	.0760	.1440			.2240		.3030	.1030	.0300	.0100	.0100
120.000			.6840	.2570	.1830	.2190			.3510		.1470	-.0150	.0440	.0160	.0010

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB04)

MACH (1) = 2.490 BETAT (3) = -4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0960					
150.000			.6650	.2650	.2450	.3210			.8640		.0180	-.0330	-.0210	.0150	.0080
157.000								1.0680							
162.000									.8910						
165.000											-.0560	-.0470	-.0140	.0220	.0070
169.000									.8550						
172.000							1.0740								
180.000	1.5860	1.1920	.5450	.2780	.2390	.3760			1.1110		-.0860	-.0750	-.0370	-.0310	-.0270

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0410							-.1550		-.1160
40.000	.0800	.0370		.1280	.0540	-.0020	-.0640			-.1520
70.000		-.0220	-.0360	-.0320	.0110	.0670	-.0140	.0030		
90.000		-.0050	-.0230	.0190	.0480	.0560	.0260	.0110		
105.000				.0940	.0990	.0790	.0190	.0011		
110.000									-.0040	
120.000		.0010	-.0080	.3250	.2150	.0360	.0190	.0310	.0210	
135.000				.4250	.3610	-.0220	-.0120	.0350		
150.000		-.0070	-.0080	.1260	.2300	-.0260	.0450	.1120		
165.000		-.0060		.1280	.2730	.1910	.1810	.0690		
180.000		-.0400	-.0340	.0740						

MACH (1) = 2.490 BETAT (4) = -2.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5860	.9030	.3890	-.0070	.0140	.1740			.1910		.1400	.1610	.1010	.0460	-.0310
20.000			.4300	.0170	.0250	.1210			.1560		.1090				
40.000			.5170	.0710	.0410	.0320			.2840		.0990	.0630	.0680	.0170	.0340
55.000			.5480	.0980	.0480	.1390			.1320		.2350				
70.000			.5670	.0970	.0470	.1210			.1550		.2990	.0970	.0620	.0050	.0120
90.000		1.1590	.5960	.1380	.0580	.1190			.1660		.1650	.0920	.0230	-.0070	-.0010
120.000			.6280	.2190	.1630	.1630			.2730		.1140	-.0410	.0080	.0040	-.0060
142.000										.0600					
150.000			.6330	.2470	.2450	.3170			.8110		.0660	-.0450	-.0420	.0010	.0080
157.000								1.0320							
162.000									.8580						
165.000											-.0590	-.0600	-.0310	-.0130	.0060
169.000									.8580						
172.000							1.0910								

AMES 67-7x7 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNBU4)

MACH (1) = 2.490 BETAT (4) = -2.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.5080	1.2010	.5490	.2820	.2610	.3450			1.1160		-.0800	-.0560	-.0480	-.0280	-.0110
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0470							-.1310		-.0960					
40.000	.0180	.0180		.0660	.0150	-.0250	-.0860			-.1500					
70.000		-.0270	-.0450	-.0430	-.0040	.0080	-.0130	-.0160							
90.000		-.0120	-.0300	.0100	.0280	.0470	.0190	-.0030							
105.000				.0790	.0610	.0470	.0150	-.0130							
110.000									-.0150						
120.000		-.0020	-.0080	.2640	.1800	.0480	.0120	.0210	.0150						
135.000				.4480	.3690	-.0080	-.0680	.0520							
150.000		-.0040	.0000	.1560	.2900	.0070	.0700	.1100							
165.000		-.0020		.1460	.2950	.2120	.1850	.0590							
180.000		.0050	.0040	.0050											

MACH (1) = 2.490 BETAT (5) = 2.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5830	.9240	.4270	.0080	.0240	.1570			.0940		.1480	.1590	.1090	.0410	-.0330
20.000			.4250	.0080	.0240	.1360			.1560		.1420				
40.000			.4560	.0230	.0180	.0470			.1520		.0980	.1000	.0660	-.0040	.0010
55.000			.4490	.0290	.0110	.0650			.0930		.2020				
70.000			.4420	.0270	.0020	.0580			.0710		.1590	.0490	-.0230	-.0110	-.0110
90.000		1.0190	.4800	.0540	.0070	.0480			.1090		.0400	-.0310	-.0010	-.0270	-.0150
120.000			.5180	.1440	.1090	.1170			.1170		.0210	-.0920	-.0840	-.0220	-.0090
142.000										.0020					
150.000			.5620	.2060	.2150	.2730			.0830		-.0410	-.0910	-.0710	-.0510	-.0010
157.000								.9480							
162.000									.0940						
165.000											-.0910	-.0910	-.0580	-.0390	-.0070
169.000									.0520						
172.000							1.0540								
180.000	1.5830	1.2030	.5420	.2090	.2750	.3550			1.1060		-.0840	-.0580	-.0490	-.0350	-.0130
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0440							-.1230		-.1040					
40.000	-.0230	.0420		-.0090	-.0550	-.0720	-.1180			-.1140					

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU4)

MACH (1) = 2.490 BETAT (5) = 2.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0300	-.0520	-.0530	-.0240	-.0130	-.0300	-.0380		
90.000		-.0110	-.0330	.0170	.0080	.0070	-.0180	-.0320		
105.000				.0550	.0090	.0080	-.0210	-.0400		
110.000									-.0370	
120.000		.0000	-.0040	.1910	.0930	-.0410	-.0380	-.0110	-.0120	
130.000				.5190	.3680	-.0460	-.0150	.0090		
150.000		.0070	.0040	.2120	.3990	.0570	.0900	.0580		
165.000		.0050		.0590	.3320	.2380	.1540	.0560		
180.000		-.0010	.0000	.0020						

MACH (1) = 2.490 BETAT (6) = 4.360

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	1.5700	.9010	.4210	.0080	.0130	.1830			.1190		.1000	.1300	.0610	.0340	-.0340
20.000			.4100	.0070	.0180	.1610			.0810		.0960				
40.000			.4175	.0150	.0110	.0530			.0980		.1050	.1070	.0460	-.0190	-.0190
55.000			.4030	.0060	-.0030	.0620			.0720		.1440				
70.000			.3820	-.0020	-.0170	.0330			.0530		.0930	.0370	-.0240	-.0210	-.0190
90.000		.9360	.4010	.0200	-.0180	.0290			.0750		.0240	-.0580	-.0310	-.0310	-.0190
120.000			.4680	.1160	.0820	.0780			.0930		-.0090	-.1070	-.1070	-.0440	-.0100
142.000										-.0180					
150.000			.5320	.1910	.1960	.2370			.0240		-.0550	-.1030	-.0810	-.0610	-.0140
157.000								.0520							
162.000									.7820						
165.000											-.1030	-.0920	-.0620	-.0470	-.0490
180.000									.8440						
172.000							1.0310								
180.000	1.9700	1.1970	.5410	.2710	.2740	.3580			1.0935		-.0800	-.0590	-.0440	-.0390	-.0280

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0420							-.1450		-.1180
40.000	-.0260	-.0080		-.0480	-.0740	-.1020	-.1450			-.1060
70.000		-.0300	-.0500	-.0520	-.0240	-.0150	-.0390	-.0480		
90.000		-.0110	-.0320	.0110	-.0040	.0020	-.0270	-.0420		
105.000				.0310	-.0120	.0020	-.0340	-.0490		
110.000									-.0450	
120.000		-.0080	-.0100	.1630	.0990	-.0770	-.0680	-.0390	-.0260	
135.000				.5920	.3590	-.0300	-.0340	-.0240		
150.000		.0040	.0000	.1970	.4610	.0740	.0600	.0320		

AMES 87-767 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB04)

MACH (1) = 2.490 BETAT (6) = 4.360

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0250		.0430	.4240	.2440	.0940	.0360		
180.000		-.0400	-.0370	.0570						

MACH (1) = 2.490 BETAT (7) = 6.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5560	.8970	.3970	.0240	.0400	.2330			.1420		.0620	.0660	.0250	-.0070	-.0420
25.000			.3920	.0150	.0260	.1690			.1000		.0850				
40.000			.3820	.0060	.0110	.0380			.0640		.0390	.0010	.0110	-.0490	-.0370
55.000			.3580	.0040	-.0110	.0290			.0460		.0850				
70.000			.3330	-.0270	-.0140	.0200			.0520		.0670	-.0310	-.0290	-.0330	-.0270
90.000		.8940	.3500	-.0070	-.0260	.0140			.0450		.0630	-.0760	-.0810	-.0360	-.0290
125.000			.4210	.0870	.0610	.0580			.0550		-.0370	-.1220	-.1240	-.0750	-.0140
142.000										-.0360					
150.000			.4970	.1750	.1800	.2320			.0790		-.0690	-.1140	-.0890	-.0690	-.0430
157.000								.8770							
162.000									.7690						
165.000											-.1160	-.0960	-.0660	-.0620	-.0900
169.000									.8430						
172.000							1.0070								
180.000	1.5560	1.1860	.5360	.2650	.2720	.3580			1.0880		-.0750	-.0710	-.0370	-.0280	-.0760

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0260							-.1470		-.1200
40.000	-.0370	-.0180		-.0650	-.1020	-.1330	-.1510			-.1150
70.000		-.0260	-.0490	-.0480	-.0270	-.0160	-.0420	-.0540		
90.000		-.0090	-.0300	-.0010	-.0110	-.0040	-.0330	-.0540		
105.000				.0340	-.0250	-.0660	-.0470	-.0570		
110.000									-.0500	
125.000		-.0120	-.0180	.1690	.0380	-.0930	-.0810	-.0690	-.0590	
135.000				.5880	.3760	-.0480	-.0600	-.0540		
150.000		-.0440	-.0540	.0800	.2630	.0710	.0380	.0270		
165.000		-.0640		.0800	.3090	.1150	.0460	-.0240		
180.000		-.0960	-.0710	.0650						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB:M4)

MACH (1) = 2.498 BETAT (8) = 8.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5320	.9570	.3570	.1070	.0390	.2920			.1250		.0610	.0860	.0150	-.0150	-.0520
20.000			.3330	-.0040	.0130	.2180			.1030		.0370				
40.000			.3340	-.0330	-.0130	.0650			.0220		-.0280	-.0350	-.0570	-.0660	-.0720
55.000			.3180	-.0460	-.0380	.0210			.0440		.0560				
70.000			.2910	-.0530	-.0410	-.0140			.0290		.0660	-.0450	-.0510	-.0430	-.0330
90.000		.8420	.3020	-.0320	-.0540	-.0180			-.0190		-.0380	-.0900	-.0870	-.0520	-.0320
120.000			.3790	.0610	.0340	.0310			.0220		-.0720	-.1410	-.1420	-.0960	-.0340
142.000										-.0580					
150.000			.4650	.1580	.1630	.1930			.0190		-.0840	-.1220	-.1020	-.0720	-.0710
157.000								.8000							
162.000									.0520						
165.000											-.1350	-.1010	-.0780	-.0950	-.1140
169.000									.0320						
172.000							.9480								
180.000	1.5320	1.1790	.5280	.2620	.2720	.3750			1.0660		-.0690	-.0730	-.0500	-.0780	-.1130

X/LB	.5073	.6026	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0240							-.1430		-.1280
40.000	-.0880	-.0170		-.0990	-.1030	-.1520	-.1550			-.1270
70.000		-.0190	-.0460	-.0900	-.0280	-.0140	-.0440	-.0580		
90.000		-.0100	-.0350	-.0060	-.0120	-.0120	-.0440	-.0630		
105.000				.0380	-.0240	-.0215	-.0570	-.0640		
110.000									-.0590	
120.000		-.0210	-.0230	.1870	.0230	-.1030	-.1000	-.0860	-.0740	
135.000				.3690	.3700	-.0540	-.0780	-.0740		
150.000		-.1115	-.1000	.1030	.0380	.0230	-.0690	-.0250		
165.000		-.1030		.0290	.1380	.0110	-.0220	-.0790		
180.000		-.1420	-.0890	-.0530						

MACH (2) = 2.999 BETAT (1) = -8.580

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.1000	.0000	.0040	.0220	.0950			.1840		.1040	.0760	.0730	.0110	-.0020
20.000			.4780	.0430	.0240	.1110			.3060		.1180				
40.000			.6550	.1460	.0800	.1640			.3150		.1810	.1150	.0420	.0490	.0390
55.000			.7120	.2330	.1790	.2290			.4030		.3540				
70.000			.8050	.2610	.2020	.2140			.2590		.4270	.2130	.0990	.0960	.0810
90.000		.1000	.8420	.2990	.2190	.2270			.2370		.2980	.1920	.1140	.0820	.0640
120.000			.8210	.3480	.2970	.3330			.4590		.2200	.0570	.0730	.0730	.0450

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU4)

MACH (2) = 2.999 BETAT (1) = -8.500

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.2030					
150.000			.7450	.3130	.3090	.3850			.9970		.0690	.0460	.0310	.0500	.0360
157.000								1.1400							
162.000									1.0530						
165.000											.0300	.0360	.0410	.0410	.0430
169.000									.9520						
172.000							1.0300								
180.000	.0000	.0000	.5590	.2800	.2680	.3540			1.1970		-.0270	-.0330	-.0210	-.0560	-.0720

X/LB	.5873	.6626	.7380	.7889	.8293	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0360							-.1040		-.1030
40.000	.0510	.0900		.2250	.1790	.1230	.0490			-.0860
75.000		.0220	-.0150	-.0120	.0380	.0710	.0470	.0390		
90.000		.0370	.0060	.0250	.0840	.1120	.0960	.0770		
105.000				.1130	.1150	.1570	.1050	.0730		
115.000									.0710	
125.000		.0290	.0150	.3630	.2940	.0970	.1030	.0950	.0810	
135.000				.3670	.3710	.0150	.0070	.0330		
150.000		.0190	.0140	.0940	.1470	-.0360	-.0050	.0660		
165.000		.0270		.1540	.1920	.1250	.1920	.0960		
180.000		-.1160	-.0690	-.0650						

MACH (2) = 2.999 BETAT (2) = -6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0080	.0010	.0770			.1510		.0990	.0680	.0650	.0180	-.0180
20.000			.4560	.0310	.0230	.0830			.2260		.1240				
40.000			.8070	.1180	.0730	.1450			.1810		.1670	.1040	.0520	.0310	.0230
55.000			.6590	.1090	.1370	.1940			.2400		.3320				
70.000			.7360	.2150	.1570	.1740			.2010		.3520	.1810	.0660	.0730	.0610
90.000		.0000	.7790	.2520	.1760	.1870			.2580		.2080	.1440	.1120	.0610	.0470
120.000			.7690	.3110	.2610	.2870			.3860		.1870	.0350	.0150	.0630	.0310
142.000										.1680					
150.000			.7160	.2970	.2940	.3590			.9450		.0570	.0280	.0490	.0210	.0240
157.000								1.1200							
162.000									1.0150						
165.000											.0190	.0190	.0210	.0080	.0310
169.000									.9490						
172.000							1.0990								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU4)

MACH (2) = 2.999 BETAT (2) = -6.42U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
180.000	.0000	.0000	.5610	.2820	.2680	.3440			1.2180		-.0270	-.0320	-.0270	-.0220	-.0410

X/LB	.5873	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0390							-.1060		-.1150
40.000	.0250	.0530		.1840	.1370	.0770	.0230			-.1050
70.000		.0420	-.0300	-.1270	.0150	.0370	.0160	.0150		
90.000		.0160	-.0115	.0010	.0440	.0750	.0660	.0510		
105.000				.0850	.0810	.1170	.0760	.0490		
110.000									.0460	
120.000		.0180	.0010	.3290	.2460	.0540	.0700	.0650	.0610	
135.000				.3850	.3570	.0050	-.0010	.0210		
150.000		.0070	.0040	.0910	.1640	-.0320	-.0420	.0570		
165.000		.0130		.0920	.1940	.1530	.1790	.0960		
180.000		-.0760	-.0820	-.0260						

MACH (2) = 2.999 BETAT (3) = -4.26U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	-.0020	.0010	.1120			.1160		.0490	.0680	.0820	.0270	.0000
20.000			.4350	.0170	.0080	.0850			.1740		.1040				
40.000			.5630	.0840	.0450	.1470			.1220		.1670	.0910	.0540	.0250	.0150
55.000			.6150	.1450	.0990	.1470			.1590		.3130				
70.000			.6620	.1690	.1160	.1360			.1470		.2050	.1530	.0680	.0500	.0380
90.000		.0000	.7080	.2080	.1330	.1470			.1640		.1500	.0450	.0830	.0420	.0260
120.000			.7180	.2750	.2260	.2470			.3210		.1500	.0070	-.0150	.0360	.0170
142.000										.1320					
150.000			.6910	.2790	.2740	.3320			.0850		.0390	.0090	-.0130	-.0120	-.0110
157.000								1.0800							
162.000									.9800						
165.000											.0010	-.0150	-.0040	-.0120	.0150
169.000									.9490						
172.000							1.0550								
180.000	.0000	.0000	.5670	.2800	.2700	.3430			1.2340		-.0320	-.0340	-.0270	-.0220	-.0290

X/LB	.5873	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0190							-.1040		-.1050
40.000	-.0480	.0390		.1340	.0840	.0330	-.0150			-.1050

AMES 87-757 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU4)

MACH (2) = 2.999 BETAT (3) = -4.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.9873	.8826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0150	-.0480	-.0430	-.0090	.0080	-.0090	-.0140		
90.000		-.0010	-.0260	-.0200	.0120	.0490	.0430	.0310		
105.000				.0640	.0470	.0730	.0500	.0250		
110.000									.0250	
120.000		.0050	-.0080	.3130	.2020	.0190	.0210	.0440	.0410	
135.000				.3940	.3410	-.0020	-.0130	.0080		
150.000		-.0010	-.0050	.0890	.1850	-.0210	.0060	.0630		
165.000		.0010		.0830	.2050	.1710	.1800	.0840		
180.000		-.0420	-.0490	.0240						

MACH (2) = 2.999 BETAT (4) = -2.110

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0040	-.0080	.1270			.1050		.0310	.1080	.1130	.0710	.0400
20.000			.4190	.0100	-.0100	.0720			.1470		.0680				
40.000			.5210	.0650	.0180	.1150			.0930		.1650	.0730	.0560	.0350	.0210
55.000			.5380	.1110	.0670	.1090			.1220		.2050				
70.000			.5990	.1290	.0790	.0990			.1120		.1520	.0910	.0530	.0310	.0230
90.000		.0000	.6410	.1650	.0990	.1010			.1060		.1110	.0120	.0290	.0270	.0140
120.000			.6690	.2420	.1960	.1860			.2840		.1140	-.0170	-.0300	-.0010	.0090
142.000										.1020					
150.000			.6650	.2630	.2610	.3090			.8280		.0250	-.0130	-.0280	-.0220	.0420
157.000								1.0570							
162.000									.9500						
165.000											-.0120	-.0320	-.0190	-.0160	-.0090
169.000									.9500						
172.000							1.0870								
180.000	.0000	.0000	.5740	.2850	.2780	.3290			1.2460		-.0400	-.0290	-.0240	-.0190	-.0250

X/LB	.9873	.8826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0250							-.1120		-.1040
40.000	.0140	.0200		.0830	.0470	-.0120	-.0450			-.1180
75.000		-.0250	-.0520	-.0530	-.0280	-.0110	-.0210	-.0180		
90.000		-.0080	-.0350	-.0290	-.0100	.0310	.0230	.0080		
105.000				.0480	.0250	.0330	.0200	.0060		
110.000									.0470	
120.000		-.0010	-.0100	.2640	.1660	-.0050	-.0190	.0220	.0220	
135.000				.4040	.3370	-.0060	-.0160	.0080		
150.000		-.0020	-.0050	.0950	.2210	-.0040	.0290	.0700		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB04)

MACH (2) = 2.999 BETAT (4) = -2.110

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0420		.0870	.2230	.1810	.1690	.0740		
180.000		-.0160	-.0110	-.0020						

MACH (2) = 2.999 BETAT (5) = 2.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0300	.0000	.0580			.1070		.0330	.1380	.1150	.0780	.0110
20.000			.3840	.0280	-.0050	.0480			.0960		.0370				
40.000			.4390	.0240	.0040	.0330			.0590		.0630	.0840	.0750	.0280	-.0150
55.000			.4530	.0430	.0160	.0440			.0470		.0850				
70.000			.4650	.0530	.0180	.0440			.0290		.0690	-.0070	.0080	.0030	.0020
90.000		.0000	.4940	.0850	.0340	.0420			.0680		.0190	-.0480	-.0520	-.0650	-.0650
120.000			.5470	.1700	.1270	.1120			.1230		.0430	-.0590	-.0650	-.0650	-.0690
142.000										.0500					
150.000			.5850	.2220	.2170	.2670			.6930		-.0010	-.0490	-.0520	-.0420	-.0400
157.000								.9940							
162.000									.9000						
165.000											-.0420	-.0540	-.0410	-.0250	-.0310
169.000									.9370						
172.000							1.0780								
180.000	.0000	.0000	.5660	.2790	.2730	.3290			1.2290		-.0460	-.0320	-.0230	-.0210	-.0260

X/LB	.5073	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.1010		-.1050
40.000	-.0150	-.0220		.0260	-.0320	-.0360	-.0750			-.1240
70.000		-.0360	-.0580	-.0540	-.0320	-.0220	-.0350	-.0320		
90.000		-.0170	-.0390	-.0080	.0030	.0050	-.0170	-.0260		
105.000				.0510	.0080	.0040	-.0130	-.0250		
110.000									-.0200	
120.000		-.0040	-.0100	.1150	.0880	-.0400	-.0450	-.0140	.0000	
135.000				.4160	.3590	-.0050	-.0040	.0110		
150.000		-.0070	.0030	.1740	.3850	.0620	.0750	.0610		
165.000		-.0200		.0340	.2290	.2390	.1330	.0750		
180.000		-.0210	-.0130	-.0040						

AMES 87-707 IA9 02A + 53 + T9 ORBITER FUSELAGE (RBNB04)

MACH (2) = 2.999 BETAT (6) = 4.380

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	.0000	.0000	.0000	-.0040	-.0080	.1410			.1110		.0510	.0820	.0910	.0270	.0420
20.000			.0690	-.0090	-.0170	.1070			.0940		.0130				
40.000			.0440	.0030	-.0230	.0390			.0870		.0210	.0810	.0890	.0090	-.0250
55.000			.0490	.0190	-.0120	.0210			.0240		.0720				
70.000			.0460	.0260	-.0060	.0200			.0110		.0440	-.0150	-.0310	-.0480	-.0650
90.000		.0000	.0430	.0530	.0060	.0180			.0290		-.0110	-.0650	-.0650	-.0400	-.0690
120.000			.0490	.0390	.0090	.0100			.0140		.0170	-.0690	-.0810	-.0810	-.0260
142.000										.0300					
150.000			.0490	.0230	.0190	.0230			.0630		-.0120	-.0620	-.0620	-.0490	-.0440
157.000								.0120							
162.000									.0880						
165.000											-.0530	-.0590	-.0420	-.0320	-.0460
169.000									.0340						
172.000							.0410								
180.000	.0000	.0000	.0620	.0240	.0690	.0270			.0160		-.0400	-.0310	-.0290	-.0240	-.0310

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0200							-.1030		-.1030
40.000	-.0200	-.0320		-.0150	-.0360	-.0620	-.0980			-.1040
70.000		-.0340	-.0520	-.0530	-.0340	-.0150	-.0340	-.0420		
90.000		-.0130	-.0280	-.0040	.0060	-.0030	-.0230	-.0300		
105.000				.0360	-.0040	-.0020	-.0230	-.0340		
110.000									-.0260	
120.000		-.0060	-.0080	.1040	.0710	-.0520	-.0540	-.0400	-.0260	
135.000				.5610	.3530	-.0070	-.0190	-.0130		
150.000		-.0210	-.0120	.1130	.5010	.0490	.0530	.0360		
165.000		-.0540		.0370	.2820	.1630	.0650	.0450		
180.000		-.0450	-.0520	.0210						

MACH (2) = 2.999 BETAT (7) = 6.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0110	-.0010	.0670			.1400		.1010	.0890	.0780	.0110	-.0220
20.000			.0580	-.0020	-.0140	.0590			.0980		.0470				
40.000			.0750	-.0070	-.0220	.0390			.0530		-.0090	.0320	.0410	-.0140	-.0530
55.000			.0740	.0000	-.0270	-.0010			.0120		.0540				
70.000			.0570	.0010	-.0270	.0060			-.0060		.0300	-.0270	-.0570	-.0180	-.0160
90.000		.0000	.0770	.0230	-.0150	.0020			.0030		-.0360	-.0810	-.0810	-.0680	-.0160
120.000			.0440	.0190	.0770	.0670			.0650		-.0090	-.0840	-.0950	-.0920	-.0430

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB04)

MACH (2) = 2.999 BETA? (7) = 6.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0060					
150.000			.5130	.1860	.1820	.2120			.5770		-.0260	-.0780	-.0750	-.0550	-.0490
157.000								.8920							
162.000									.8680						
165.000											-.0770	-.0650	-.0460	-.0440	-.0680
169.000									.9270						
172.000							.9760								
180.000	.0000	.0000	.5540	.2690	.2650	.3190			1.2010		-.0370	-.0460	-.0310	-.0280	-.0490

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0470							-.1230		-.1160
40.000	-.0370	-.0400		-.0300	-.0570	-.0850	-.1150			-.1800
70.000		-.0320	-.0520	-.0550	-.0390	-.0170	-.0360	-.0460		
90.000		-.0160	-.0290	-.0110	-.0050	-.0080	-.0280	-.0410		
105.000				.0280	-.0170	-.0200	-.0400	-.0460		
110.000									-.0390	
120.000		-.0140	-.0170	.0990	.0460	-.0650	-.0680	-.0550	-.0460	
135.000				.4630	.3540	-.0260	-.0400	-.0320		
150.000		-.0600	-.0610	.0290	.1820	.0620	.0600	.0270		
165.000		-.0750		.0360	.1420	.0640	.0180	-.0180		
180.000		-.0840	-.0710	-.0330						

MACH (2) = 2.999 BETAT (8) = 8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.5000	-.0020	.0180	.0900			.1780		.0930	.0790	.0850	.0080	-.0640
20.000			.3470	-.0140	.0020	.0670			.1060		.0530				
40.000			.3510	-.0200	-.0290	.0270			.0400		-.0170	-.0170	-.0460	-.0710	-.0790
55.000			.3460	-.0190	-.0330	.0050			.0230		.0420				
70.000			.3130	-.0190	-.0400	-.0650			.0040		.0310	-.0320	-.0580	-.0360	-.0230
90.000		.0000	.3200	.0020	-.0310	-.0110			-.0400		-.0540	-.0910	-.0840	-.0820	-.0360
120.000			.4000	.0860	.0550	.0500			.0420		-.0300	-.0930	-.1040	-.0990	-.0750
142.000										-.0090					
150.000			.4800	.1690	.1660	.1970			.5240		-.0370	-.0820	-.0730	-.0580	-.0510
157.000								.8210							
162.000									.8550						
165.000											-.0870	-.0640	-.0480	-.0650	-.0830
169.000									.9170						
172.000							.9120								

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB04)

MACH (2) = 2.999 BETAT (8) = 8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	.0000	.0000	.5480	.2630	.2620	.3260			1.1800		-.0270	-.0330	-.0360	-.0550	-.0820

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0390							-.1140		-.1090
40.000	-.0730	-.0530		-.0380	-.0850	-.0860	-.1100			-.0920
70.000		-.0370	-.0520	-.0470	-.0440	-.0070	-.0350	-.0470		
90.000		-.0280	-.0390	-.0360	-.0020	-.0140	-.0360	-.0490		
105.000				.0280	-.0060	-.0280	-.0480	-.0470		
110.000									-.0420	
120.000		-.0330	-.0380	.1100	.0290	-.0750	-.0760	-.0670	-.0580	
135.000				.2190	.2950	-.0370	-.0550	-.0640		
150.000		-.0940	-.0920	-.0350	.0210	.0180	-.0140	-.0310		
165.000		-.0960		-.0140	.0630	-.0110	-.0390	-.0730		
180.000		-.1150	-.1010	-.0700						

MACH (3) = 3.502 BETAT (1) = -8.740

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0220	-.0020	.0910			.1880		.1280	.0770	.0630	.0410	.0130
25.000			.4950	.0560	-.0030	.0930			.1370		.1700				
40.000			.6820	.1600	.0850	.1770			.1280		.2420	.1420	.0660	.0430	.0510
55.000			.7380	.2520	.1890	.1730			.2330		.3990				
70.000			.8660	.2910	.2150	.2050			.2210		.3440	.2320	.1360	.1130	.0920
90.000		.0000	.9150	.3330	.2360	.2340			.2220		.2460	.1150	.1380	.1040	.0750
120.000			.8860	.3750	.3140	.3440			.4590		.2320	.0750	.0480	.0740	.0530
142.000										.2370					
150.000			.7920	.3350	.3180	.3860			1.0650		.1910	.0580	.0390	.0290	.0740
157.000								1.2090							
162.000									1.1650						
165.000											.0600	.0440	.0480	.0270	.0390
169.000									1.0690						
172.000							1.0670								
180.000	.0000	.0000	.5910	.2910	.2730	.3180			1.3170		-.0030	-.0220	-.0190	-.0460	-.0630

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0110							-.0800		-.0860
40.000	.0390	.0440		.2210	.1870	.1110	.0740			-.0530

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB04)

MACH (3) = 3.502 BETAT (1) = -8.740

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		.0280	-.0090	-.0010	.0310	.0670	.0510	.0420		
90.000		.0420	.0120	.0190	.0640	.0990	.1060	.0920		
105.000				.1120	.1130	.1290	.1290	.0900		
110.000									.1010	
120.000		.0250	.0130	.3720	.3230	.0970	.1000	.1060	.0980	
135.000				.3500	.3880	.0360	.0150	.0240		
150.000		.0250	.0190	.1010	.1590	-.0170	-.0020	.0360		
165.000		.0350		.1050	.1740	.1120	.1740	.0890		
180.000		-.0810	-.0770	-.0630						

MACH (3) = 3.502 BETAT (2) = -6.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1959	.2259	.2711	.3210	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0200	.0150	.1890			.1550		.0840	.0890	.0650	.0410	.0060
20.000			.4700	.0440	-.0020	.0810			.1290		.1670				
40.000			.6360	.1270	.0610	.1540			.0990		.2390	.1170	.0660	.0370	.0290
55.000			.6790	.2060	.1490	.1380			.1840		.2670				
70.000			.7930	.2440	.1720	.1580			.1700		.2110	.1740	.1130	.0900	.0720
90.000		.0000	.8410	.*	.1920	.1940			.1710		.1880	.0680	.0890	.0860	.0620
120.000			.8300	.3380	.2780	.2990			.3880		.1890	.0470	.0180	.0480	.0410
142.000										.1970					
150.000			.7840	.3190	.3030	.3620			1.0010		.0710	.0380	.0190	.0090	.0120
157.000								1.1880							
162.000									1.1220						
165.000											.0410	.0140	.0240	.0090	.0120
169.000									1.0640						
172.000							1.1060								
180.000	.0000	.0000	.5990	.2940	.2760	.3240			1.3440		-.0110	-.0200	-.0250	-.0270	-.0470

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.0810		-.0890
40.000	.0250	.0120		.1720	.1490	.0670	.0420			-.0670
70.000		.0110	-.0240	-.0230	.0020	.0320	.0200	.0190		
90.000		.0240	-.0030	-.0020	.0340	.0670	.0720	.0610		
105.000				.0810	.0790	.0820	.0810	.0620		
110.000									.0750	
120.000		.0140	.0030	.3190	.2700	.0830	.0410	.0800	.0750	
135.000				.3510	.3580	.0210	.0030	.0150		
150.000		.0080	.0070	.0880	.1660	-.0190	.0000	.0240		

AMES 87-707 IA9 O2A + S3 + TS ORBITER FUSELAGE (RBNBU4)

MACH (3) = 3.502 BETAT (2) = -6.54D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7389	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		.0180		.0780	.1720	.1260	.1650	.0900		
180.000		-.0640	-.0550	-.0350						

MACH (3) = 3.502 BETAT (3) = -4.34D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0140	.0870	.0790			.1290		.0520	.0730	.0780	.0410	.0180
20.000			.4460	.0250	.0110	.0760			.1170		.1030				
40.000			.5820	.0950	.0310	.1040			.0850		.2510	.1130	.0640	.0330	.0180
55.000			.6210	.1620	.1070	.1120			.1420		.1650				
70.000			.7150	.1910	.1270	.1190			.1250		.1620	.0780	.0900	.0650	.0530
90.000		.0000	.7650	.2300	.1490	.1520			.1280		.1440	.0410	.0190	.0650	.0410
125.000			.7720	.2970	.2390	.2520			.3220		.1560	.0240	-.0040	.0080	.0240
142.000										.1640					
150.000			.7330	.2990	.2630	.3350			.9320		.0550	.0220	.0000	-.0090	-.0030
157.000								1.1460							
162.000									1.0870						
165.000											.0270	.0000	.0050	-.0080	-.0170
169.000									1.0590						
172.000							1.1110								
180.000	.0000	.0000	.6010	.2960	.2750	.3230			1.3650		-.0110	-.0260	-.0210	-.0110	-.0390

X/LB	.5873	.6626	.7389	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0220							-.0690		-.0830
40.000	.0020	-.0100		.1160	.0970	.0390	-.0030			-.0760
70.000		-.0090	-.0360	-.0370	-.0210	.0050	-.0040	-.0050		
90.000		.0050	-.0220	-.0220	.0060	.0360	.0390	.0350		
105.000				.0500	.0440	.0520	.0460	.0340		
110.000									.0530	
120.000		-.0010	-.0110	.3000	.2180	.0520	.0120	.0380	.0490	
135.000				.3660	.3420	.0080	-.0040	.0080		
150.000		-.0020	-.0030	.0760	.1760	-.0180	-.0040	.0230		
165.000		.0040		.0580	.1660	.1460	.1710	.0920		
180.000		-.0340	-.0470	.0080						

AMES 07-7U7 IA9 ORA + S3 + T9 ORBITER FUSELAGE (RBNB:4)

MACH (3) = 3.502 BETAT (4) = -2.150

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0290	.0690	.0650			.1200		.0500	.0740	.1010	.0600	.0370
20.000			.4300	.0270	.0160	.0630			.1060		.0780				
40.000			.5430	.0780	.0350	.1960			.0720		.1230	.1110	.0550	.0330	.0340
55.000			.5600	.1280	.0810	.0950			.1160		.1120				
70.000			.6440	.1550	.1000	.0950			.1130		.1340	.0520	.0390	.0510	.0390
90.000		.0000	.6890	.1920	.1200	.1190			.1140		.1090	.0210	.0060	.0440	.0280
120.000			.7120	.2650	.2 30	.2080			.2720		.1230	.0050	-.0130	-.0080	.0110
142.000										.1390					
150.000			.7010	.2860	.2670	.3110			.8630		.0430	.0050	-.0110	-.0170	-.0160
157.000								1.1120							
162.000									1.0540						
165.000											.0150	-.0110	-.0090	-.0120	-.0210
169.000									1.0540						
172.000							1.1250								
180.000	.0000	.0000	.6080	.3010	.2810	.3260			1.3670		-.0140	-.0140	-.0130	-.0070	-.0220

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0010							-.0650		-.0810
40.000	.0070	.0250		.0970	.0470	.0060	-.0170			-.0860
70.000		-.0130	-.0400	-.0420	-.0230	-.0040	-.0170	-.0160		
90.000		-.0010	-.0260	-.0230	.0000	.0230	.0220	.0160		
105.000				.0500	.0330	.0320	.0220	.0110		
115.000									.0440	
120.000		.0000	-.0060	.2820	.1870	.0310	.0000	.0040	.0250	
135.000				.3800	.3410	.0110	-.0030	.0070		
150.000		.0040	.0020	.0820	.1970	.0020	.0100	.0410		
165.000		.0040		.0730	.1840	.1640	.1500	.0820		
180.000		-.0170	-.0150	-.0420						

MACH (3) = 3.502 BETAT (5) = 2.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0520	.0210	.0590			.1170		.0470	.0550	.0810	.0620	.0390
20.000			.3950	.0380	.0150	.0530			.0980		.0400				
40.000			.4630	.0380	.0210	.0450			.0550		.0560	.0410	.0770	.0410	.0170
55.000			.4740	.0680	.0290	.0450			.0530		.0550				
70.000			.5070	.0810	.0390	.0480			.0280		.0560	-.0070	-.0330	.0130	.0110
90.000		.0000	.5410	.1120	.0580	.0620			.0280		.0230	-.0390	-.0450	-.0330	.0020
120.000			.5910	.1960	.1460	.1440			.1440		.0580	-.0370	-.0420	-.0490	-.0240

AMES 87-757 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB,4)

MACH (3) = 3.502 BETAT (5) = 2.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0890					
150.000			.6280	.2480	.2290	.2730			.7210		.0180	-.0310	-.0330	-.0330	-.0380
157.000								1.0680							
162.000									.9960						
165.000											-.0180	-.0360	-.0290	-.0160	-.0270
169.000									1.0320						
172.000							1.1390								
180.000	.0000	.0000	.6075	.2970	.2790	.3240			1.3480		-.0240	-.0220	-.0110	-.0080	-.0210

X/LB	.5873	.6626	.7580	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0000							-.0720		-.0840
40.000	-.0180	-.0070		.0250	-.0150	-.0380	-.0490			-.0970
70.000		-.0280	-.0490	-.0480	-.0350	-.0220	-.0300	-.0290		
90.000		-.0140	-.0300	-.0240	.0030	.0040	-.0150	-.0180		
105.000				.0540	.0260	-.0020	-.0190	-.0240		
110.000									-.0020	
120.000		-.0050	-.0075	.1130	.0840	-.0250	-.0330	-.0200	-.0110	
135.000				.3380	.3450	.0120	-.0030	.0110		
150.000		-.0190	-.0060	.1350	.3560	.0630	.0340	.0520		
165.000		-.0270		.0170	.1790	.2080	.1140	.0720		
180.000		-.0170	-.0160	-.0080						

MACH (3) = 3.502 BETAT (6) = 4.480

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0210	.0190	.0800			.1290		.0520	.0950	.0850	.0470	.0180
20.000			.3820	.0120	.0120	.0590			.1100		.0340				
40.000			.4250	.0250	-.0030	.0530			.0510		.0280	.0110	.0500	.0320	-.0140
55.000			.4310	.0440	.0070	.0330			.0380		.0370				
70.000			.4410	.0530	.0150	.0340			.0040		.0290	-.0150	-.0410	-.0130	-.0010
90.000		.0000	.4710	.0810	.0300	.0340			-.0050		-.0040	-.0500	-.0520	-.0540	-.0180
120.000			.5310	.1630	.1150	.1140			.1000		.0330	-.0450	-.0550	-.0640	-.0520
142.000										.0810					
150.000			.5870	.2280	.2080	.2510			.6510		.0140	-.0410	-.0470	-.0440	-.0400
157.000								1.0140							
162.000									.9780						
165.000											-.0320	-.0410	-.0320	-.0250	-.0370
169.000									1.0290						
172.000							1.0690								

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU4)

MACH (3) = 3.502 BETAT (6) = 4.460

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
180.000	.0000	.0000	.0000	.2940	.2760	.3190			1.3370		-.0170	-.0180	-.0220	-.0130	-.0370

X/LB	.5073	.6026	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0180							-.0770		-.0660
40.000	-.0350	-.0230		-.0060	-.0390	-.0460	-.0660			-.0940
70.000		-.0300	-.0320	-.0480	-.0410	-.0130	-.0290	-.0350		
90.000		-.0130	-.0290	-.0180	-.0010	-.0030	-.0180	-.0260		
105.000				.0310	-.0020	-.0080	-.0220	-.0270		
110.000									-.0070	
120.000		-.0120	-.0120	.0810	.0670	-.0360	-.0440	-.0350	-.0310	
135.000				.5190	.3270	-.0040	-.0160	-.0270		
150.000		-.0350	-.0250	.0810	.4050	.0520	.0340	.0310		
165.000		-.0430		.0690	.1920	.1170	.0470	.0310		
180.000		-.0300	-.0410	.0130						

MACH (3) = 3.502 BETAT (7) = 6.660

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0200	.0010	.0820			.1520		.0730	.0950	.0680	.0350	.0420
20.000			.3660	.0060	-.0110	.0710			.1000		.0300				
40.000			.3910	.0100	-.0280	.0410			.0270		.0010	-.0060	.0080	-.0210	-.0380
55.000			.3930	.0200	-.0090	.0150			.0220		.0260				
70.000			.3810	.0240	-.0220	.0150			-.0090		.0070	-.0310	-.0490	-.0300	-.0070
90.000		.0000	.4050	.0460	.0090	.0110			-.0130		-.0260	-.0660	-.0560	-.0670	-.0410
120.000			.4700	.1290	.0900	.0680			.0610		.0100	-.0580	-.0690	-.0730	-.0680
142.000										.0370					
150.000			.5370	.2010	.1880	.2260			.0830		.0020	-.0520	-.0520	-.0490	-.0460
157.000								.9380							
162.000									.0560						
165.000											-.0510	-.0440	-.0340	-.0370	-.0620
169.000									1.0100						
172.000							.9900								
180.000	.0000	.0000	.5080	.2790	.2700	.3080			1.3130		-.0130	-.0150	-.0300	-.0260	-.0540

X/LB	.5073	.6026	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0300							-.0650		-.0940
40.000	-.0600	-.0420		-.0270	-.0510	-.0510	-.0630			-.0950

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AMES 87-7U7 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU4)

MACH (3) = 3.5U2 BETAT (7) = 6.66U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.UUU		-.U42U	-.U59U	-.U49U	-.U44U	-.U67U	-.U3UU	-.U37U		
9U.UUU		-.U23U	-.U36U	-.U28U	-.UU5U	-.U11U	-.U26U	-.U33U		
1U5.UUU				.U14U	-.U11U	-.U22U	-.U37U	-.U36U		
11U.UUU									-.U64U	
12U.UUU		-.U3UU	-.U28U	.U77U	.U37U	-.U54U	-.U54U	-.U44U	-.U35U	
135.UUU				.322U	.283U	-.U21U	-.U27U	-.U24U		
15U.UUU		-.U48U	-.U56U	.U21U	.14UU	.U52U	.U37U	.U12U		
165.UUU		-.U59U		-.U58U	.U77U	.U52U	.U3UU	-.U27U		
18U.UUU		-.U73U	-.U63U	-.U45U						

MACH (3) = 3.5U2 BETAT (8) = 8.87U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U6U2	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.UUU	.UUUU	.UUUU	.UUUU	.UU2U	-.UU6U	.U82U			.17UU		.119U	.U66U	.U48U	.U34U	.UU3U
2U.UUU			.357U	.UU6U	-.U23U	.U6UU			.157U		.U42U				
4U.UUU			.362U	.U12U	-.U35U	.U3UU			.U41U		-.U2UU	-.U28U	-.U5UU	-.U68U	-.U64U
55.UUU			.362U	.UU6U	-.U24U	-.UU5U			.UU6U		.U21U				
7U.UUU			.332U	.UU3U	-.U22U	-.U42U			-.U2UU		-.U17U	-.U47U	-.U6UU	-.U43U	-.U2UU
9U.UUU		.UUUU	.352U	.U23U	-.U12U	-.U38U			-.U34U		-.U47U	-.U6UU	-.U77U	-.U6UU	-.U58U
12U.UUU			.422U	.1UUU	.U68U	.U59U			.U5UU		-.U17U	-.U73U	-.U85U	-.U85U	-.U79U
142.UUU										.U22U					
15U.UUU			.5U2U	.183U	.169U	.189U			.517U		-.U17U	-.U66U	-.U63U	-.U54U	-.U51U
157.UUU								.859U							
162.UUU									.939U						
165.UUU											-.U66U	-.U56U	-.U44U	-.U58U	-.U77U
169.UUU									.99UU						
172.UUU							.9170								
18U.UUU	.UUUU	.UUUU	.578U	.277U	.262U	.296U			1.287U		-.U11U	-.U24U	-.U36U	-.U57U	-.U77U

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.UUU	-.U14U							-.U92U		-.U93U
4U.UUU	-.U75U	-.U83U		-.U29U	-.U48U	-.U66U	-.U93U			-.U79U
7U.UUU		-.U48U	-.U8UU	-.U47U	-.U45U	.UUUU	-.U23U	-.U35U		
9U.UUU		-.U4UU	-.U48U	-.U48U	-.U15U	-.U22U	-.U36U	-.U44U		
1U5.UUU				-.U42U	-.U19U	-.U28U	-.U45U	-.U44U		
11U.UUU									-.U3UU	
12U.UUU		-.U42U	-.U42U	.U68U	.U16U	-.U59U	-.U6UU	-.U52U	-.U42U	
135.UUU				.165U	.192U	-.U38U	-.U61U	-.U59U		
15U.UUU		-.U78U	-.U8UU	-.U43U	.U7 0	.UU4U	-.U18U	-.U31U		

AMES 87-707 IA9 CEA + S3 + T9 ORBITER FUSELAGE (RBNBU4)

MACH (3) = 3.500 BETAT (8) = 8.870

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6826	.7580	.7869	.8283	.8848	.9262	.9839	1.0015	1.0392
PHI										
165.000		-.0790		-.0510	.0310	.0050	-.0380	-.0600		
180.000		-.0930	-.0880	-.0720						

AMES 67-7U7 IA9 CEA + S3 + T9 ORBITER FUSELAGE (RBNBU3) (15 MAY 73)

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 33.U35U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .03UU SCALE

PARAMETRIC DATA

ALPHAT = -2.UUU ORBINC = .5UU
RUDDER = .UUU ELEVON = .UUU
RUDFLR = .UUU

MACH (1) = 2.498 BETAT (1) = -0.43U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U6U2	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.UUU	1.4940	.0930	.4030	.U220	.U400	.3000			.1160		.U430	.U680	.U120	-.U340	-.U560
25.UUU			.4770	.0530	.U420	.3490			.1720		.U550				
40.UUU			.6310	.1410	.1210	.3000			.2400		.1130	.U540	.U220	.UU70	.U350
55.UUU			.7UU0	.2160	.1800	.4910			.3870		.2880				
70.UUU			.7510	.2330	.1910	.2740			.4610		.3610	.1340	.U410	.U410	.U480
90.UUU		1.2890	.7580	.2560	.2020	.2890			.4120		.4U60	.1290	.U480	.U200	.U320
120.UUU			.7260	.2950	.2640	.3220			.4670		.2980	.U830	.U280	.U180	.U040
142.UUU										.1540					
150.UUU			.6540	.2590	.2710	.3530			.8970		.U350	.U280	.U300	.U260	-.UU50
157.UUU								1.U270							
162.UUU									.8940						
165.UUU											-.U290	.U150	.U570	.U380	-.UU30
168.UUU									.7830						
172.UUU							.9420								
180.UUU	1.4940	1.U930	.4810	.2290	.2280	.3330			1.UU10		-.U840	-.U810	-.U570	-.1130	-.1330

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.UU15	1.U392
PHI										
.UUU	-.0830							-.1450		-.1340
40.UUU	.1240	.U870		.2330	.1440	.1080	-.U150			-.1300
70.UUU		-.U480	-.0230	-.U120	.U310	.U510	.U250	.U160		
90.UUU		.U110	-.U120	.U390	.1090	.U910	.U570	.U300		
105.UUU				.1370	.1730	.1090	.U530	.U190		
115.UUU									.U110	
120.UUU		-.U040	-.U140	.3830	.3300	.U980	.U560	.U410	.U310	
135.UUU				.2980	.3160	-.U110	-.U310	-.U210		
150.UUU		-.U170	-.U220	.U670	.U980	-.U460	-.U150	.U460		
165.UUU		-.U130		.U920	.1720	.1040	.1760	.U640		
180.UUU		-.1390	-.1080	-.U480						

AMES 87-707 IA9 CEA + S3 + T9 ORBITER FUSELAGE (RBNBUS)

MACH (1) = 2.490 BETAT (2) = -6.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5460	.9180	.4230	.0180	.0440	.1800			.1330		.0690	.0910	.0290	-.0150	-.0490
20.000			.4830	.0520	.0540	.2840			.1720		.0620				
40.000			.6020	.0960	.0960	.2590			.2410		.1020	.0370	.0140	-.0080	.0150
55.000			.6530	.1180	.1370	.4080			.3540		.2580				
70.000			.6840	.1820	.1420	.2190			.3870		.3320	.1170	.0240	.0210	.0220
90.000		1.2290	.6950	.2120	.1450	.2210			.2970		.3530	.1570	.0370	.0110	.0070
125.000			.6820	.2680	.2170	.2670			.3770		.2010	.0550	.0200	.0050	-.0110
142.000										.1070					
150.000			.6300	.2420	.2480	.3280			.8450		.0190	-.0110	.0070	.0080	-.0130
157.000								1.0070							
162.000									.8560						
165.000											-.0480	-.0200	.0060	.0250	-.0090
169.000									.7820						
172.000							.9740								
180.000	1.9020	1.1030	.4840	.2280	.2190	.3210			1.0140		-.0860	-.0660	-.0600	-.0500	-.1020

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0400							-.1350		-.1190
40.000	.0860	.0700		.1850	.1060	.0670	-.0320			-.1430
70.000		-.0290	-.0490	-.0340	.0140	.0260	.0020	.0000		
90.000		-.0110	-.0340	.0110	.0730	.0670	.0350	.0120		
105.000				.0940	.1310	.0680	.0350	.0060		
115.000									-.0010	
125.000		-.0150	-.0250	.2850	.2400	.0700	.0400	.0270	.0160	
135.000				.3000	.3070	-.0010	-.0250	-.0120		
150.000		-.0230	-.0300	.0730	.1230	-.0660	.0020	.0570		
165.000		-.0230		.0840	.1790	.1370	.1570	.0510		
180.000		-.1010	-.0820	.0180						

MACH (1) = 2.490 BETAT (3) = -4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5180	.9030	.4270	.0050	.0190	.0860			.1300		.1130	.1000	.0690	.0200	-.0510
20.000			.4770	.0610	.0410	.0430			.1870		.0810				
40.000			.5680	.0670	.0640	.0510			.2370		.0860	.0460	.0180	-.0030	.0000
55.000			.5970	.0810	.1130	.1770			.3080		.2270				
70.000			.6140	.1240	.1090	.1750			.2080		.3020	.1000	.0670	.0050	.0000
90.000		1.1750	.6280	.1670	.1110	.1790			.2020		.2950	.0930	.0220	-.0100	-.0150
120.000			.6320	.2230	.1880	.2300			.3130		.1330	.0690	.0150	-.0070	-.0260

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AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNBU5)

MACH (1) = 2.490 BETAT (3) = -4.19

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0740					
150.000			.6030	.2210	.2380	.3050			.7950		.0050	-.0360	-.0340	-.0090	-.0150
157.000								.9640							
162.000									.8210						
165.000											-.0990	-.0550	-.0330	.0060	-.0130
169.000									.7820						
172.000							.9600								
180.000	1.5160	1.1180	.4870	.2230	.2290	.3230			1.0250		-.0910	-.0850	-.0630	-.0470	-.0620
X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0660							-.1410		-.1100					
4.000	.0380	.0330		.1310	.0640	.0110	-.0620			-.1540					
7.000		-.0450	-.0590	-.0530	-.0190	-.0180	-.0300	-.0160							
9.000		-.0270	-.0460	.0010	.0300	.0270	.0020	-.0050							
105.000				.0590	.0740	.0550	.0050	-.0160							
111.000									-.0180						
120.000		-.0230	-.0330	.2660	.1910	.0600	-.0010	.0130	.0010						
135.000				.3500	.3070	-.0420	-.0330	.0020							
150.000		-.0320	-.0290	.0940	.1820	-.0520	.0070	.0780							
165.000		-.0390		.0970	.2190	.1500	.1350	.0400							
180.000		-.0630	-.0480	.0030											

MACH (1) = 2.490 BETAT (4) = -2.07

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5250	.8790	.3880	-.0140	.0000	.1320			.1010		.1490	.1590	.0880	.0230	-.0550
2.000			.4310	.0690	.0140	.0400			.1750		.1000				
4.000			.5120	.0640	.0250	-.0130			.2670		.0850	.0420	.0560	.0070	-.0310
55.000			.5340	.0910	.0220	.1100			.1900		.2030				
7.000			.5430	.0930	.0160	.0860			.1410		.2730	.0760	-.0160	-.0160	-.0160
9.000		1.1120	.5620	.1160	.0190	.0870			.1260		.1880	.0720	.0020	-.0290	-.0290
120.000			.5810	.1850	.1110	.1240			.2690		.0910	-.0520	-.0010	-.0230	-.0350
142.000										.0410					
150.000			.5760	.2040	.1840	.2460			.7440		-.0190	-.0650	-.0630	-.0220	-.0180
157.000								.9510							
162.000									.7910						
165.000											-.0680	-.0830	-.0560	-.0270	-.0190
169.000									.7860						
172.000							.9980								

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB05)

MACH (1) = 2.490 BETAT (4) = -2.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.5250	1.1260	.4900	.2310	.1960	.2700			1.0350		-.1000	-.0800	-.0720	-.0520	-.0280

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0770							-.1580		-.0940
40.000	.0030	.0040		.0730	.0190	-.0510	-.1210			-.1390
70.000		-.0560	-.0680	-.0620	-.0240	-.0490	-.0700	-.0330		
90.000		-.0390	-.0550	-.0070	.0100	-.0130	-.0370	-.0220		
105.000				.0440	.0390	-.0100	-.0350	-.0310		
110.000									-.0340	
120.000		-.0290	-.0340	.2160	.1560	-.0110	-.0380	-.0010	-.0690	
135.000				.3820	.3220	-.0670	-.0560	.0220		
150.000		-.0260	-.0230	.1240	.2460	-.0540	.0060	.0750		
165.000		-.0220		.1150	.2450	.1480	.1110	.0290		
180.000		-.0250	-.0210	-.0170						

MACH (1) = 2.490 BETAT (5) = 2.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5170	.8990	.4080	-.0030	.0270	.1290			.1030		.1370	.1600	.0950	.0230	-.0530
20.000			.4110	-.0060	.0190	.1130			.1130		.1590				
40.000			.4390	-.0080	.0150	.0440			.1240		.0950	.0830	.0560	-.0210	-.0370
55.000			.4350	-.0080	.0060	.0620			.0810		.1760				
70.000			.4200	.0150	-.0090	.0470			.0570		.1740	.0360	-.0300	-.0280	-.0340
90.000		.9780	.4310	.0400	-.0050	.0370			.0920		.0480	-.0110	-.0190	-.0460	-.0390
120.000			.4710	.0910	.0840	.0780			.1010		.0100	-.0980	-.0850	-.0380	-.0260
142.000										-.0130					
150.000			.5070	.1670	.1760	.2310			.6200		-.0550	-.1020	-.0870	-.0650	-.0120
157.000								.8670							
162.000									.7310						
165.000											-.1010	-.1050	-.0770	-.0580	-.0100
169.000									.7820						
172.000							.9650								
180.000	1.5170	1.1280	.4850	.2160	.2280	.2990			1.0250		-.0980	-.0770	-.0680	-.0510	-.0300

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0780							-.1400		-.0990
40.000	-.0350	-.0250		-.0090	-.0520	-.0840	-.1460			-.1010

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB05)

MACH (1) = 2.498 BETAT (5) = 2.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0550	-.0690	-.0870	-.0430	-.0580	-.0710	-.0540		
90.000		-.0410	-.0540	-.0870	-.0170	-.0330	-.0540	-.0440		
105.000				.0340	-.0030	-.0330	-.0660	-.0510		
110.000									-.0460	
120.000		-.0210	-.0250	.1150	.0700	-.0890	-.0690	-.0260	-.0240	
135.000				.4150	.3250	-.0960	-.0550	-.0460		
150.000		-.0110	-.0140	.1740	.3440	.0170	.0370	.0340		
165.000		-.0110		.0430	.2730	.1820	.1030	.0340		
180.000		-.0190	-.0190	-.0170						

MACH (1) = 2.498 BETAT (6) = 4.360

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5090	.8800	.4090	-.0010	.0060	.1370			.1220		.0930	.1240	.0680	.0190	-.0500
2.000			.3980	-.0050	.0490	.1330			.0820		.1150				
40.000			.4020	-.0010	.0000	.0160			.1220		.1050	.0750	.0290	-.0360	-.0520
55.000			.3810	-.0020	-.0110	.0290			.0550		.1520				
70.000			.3610	-.0010	-.0280	.0170			.0290		.1090	.0220	-.0300	-.0380	-.0460
90.000		.9110	.3740	.0070	-.0300	.0100			.0520		.0160	-.0570	-.0270	-.0450	-.0430
120.000			.4260	.0870	.0570	.0620			.0720		-.0190	-.1160	-.1130	-.0490	-.0210
142.000										-.0330					
150.000			.4730	.1500	.1590	.2010			.0640		-.0720	-.1190	-.1020	-.0770	-.0150
157.000								.8040							
162.000									.0210						
165.000											-.1170	-.1110	-.0820	-.0650	-.0520
169.000									.0760						
172.000							.9550								
180.000	1.5090	1.1220	.4800	.2240	.2270	.2940			1.0110		-.0960	-.0840	-.0630	-.0550	-.0660

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0680							-.1290		-.1140
40.000	-.0390	-.0300		-.0410	-.0760	-.1020	-.1450			-.1000
70.000		-.0540	-.0670	-.0670	-.0480	-.0390	-.0550	-.0630		
90.000		-.0390	-.0520	-.0110	-.0230	-.0210	-.0450	-.0580		
105.000				.0110	-.0240	-.0200	-.0510	-.0670		
110.000									-.0590	
120.000		-.0270	-.0330	.1070	.0410	-.0840	-.0750	-.0530	-.0490	
135.000				.5330	.3220	-.0470	-.0480	-.0380		
150.000		-.0190	-.0190	.1650	.3520	.0600	.0300	.0110		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB05)

MACH (1) = 2.498 BETAT (6) = 4.3(U)

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0360		-.0010	.3200	.1700	.0750	.0160		
180.000		-.0640	-.0540	-.0420						

MACH (1) = 2.498 BETAT (7) = 6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4950	.8690	.4030	.0130	.0340	.2260			.1250		.0620	.0840	.0180	-.0110	-.0540
2.000			.3930	.0210	.0260	.1240			.1060		.0790				
4.000			.1340	.0110	.0080	.0870			.0710		.0270	.0590	-.0070	-.0640	-.0560
55.000			.3650	.0110	-.0120	.0620			.0340		.0790				
7.000			.3250	-.0250	-.0190	.0080			.0360		.0590	-.0190	-.0380	-.0500	-.0530
9.000		.8550	.3230	-.0180	-.0200	.0030			.0360		.0090	-.0830	-.0660	-.0450	-.0490
12.000			.3810	.0630	.0360	.0460			.0420		-.0450	-.1280	-.1260	-.0720	-.0940
142.000										-.0500					
150.000			.4440	.1380	.1440	.1920			.0210		-.0820	-.1250	-.1050	-.0940	-.0430
157.000								.8050							
162.000									.7090						
165.000											-.1290	-.1110	-.0850	-.0760	-.0950
169.000									.7760						
172.000							.9160								
180.000	1.4950	1.1150	.4770	.2220	.2290	.2980			1.0040		-.0870	-.0870	-.0560	-.0490	-.0150

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0360							-.1550		-.1140
4.000	-.0420	-.0310		-.0570	-.1020	-.1420	-.1420			-.1120
7.000		-.0480	-.0660	-.0670	-.0470	-.0690	-.0870	-.0710		
9.000		-.0340	-.0490	-.0210	-.0270	-.0470	-.0750	-.0670		
105.000				.0080	-.0430	-.0490	-.0850	-.0700		
110.000									-.0610	
120.000		-.0320	-.0400	.1450	.0230	-.1170	-.1110	-.0760	-.0680	
135.000				.5350	.3330	-.0770	-.0940	-.0680		
150.000		-.0450	-.0530	.0630	.0310	.0210	.0050	.0050		
165.000		-.0720		.0230	.0450	.0580	-.0040	-.0170		
180.000		-.1080	-.0950	.0060						

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB05)

MACH (1) = 2.498 BETAT (8) = 8.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4840	.8760	.3510	.0660	.0330	.3010			.1200		.0440	.0720	.0060	-.0380	-.0590
20.000			.3370	.0020	.0090	.2310			.0830		.0250				
40.000			.3300	.0030	-.0170	.0110			.0170		-.0420	-.0320	-.0640	-.0870	-.1040
55.000			.3060	-.0390	-.0470	-.0030			.0250		.0450				
70.000			.2720	-.0570	-.0470	-.0280			.0260		.0540	-.0470	-.0390	-.0590	-.0600
90.000		.7980	.2720	-.0440	-.0580	-.0300			-.0180		-.0200	-.0850	-.0890	-.0570	-.0540
120.000			.3380	.0380	.0050	.0060			.0640		-.0790	-.1440	-.1440	-.0860	-.0340
142.000										-.0710					
150.000			.4140	.1250	.1240	.1450			.4610		-.0950	-.1370	-.1170	-.0850	-.0890
157.000								.7280							
162.000									.6900						
165.000											-.1460	-.1160	-.0940	-.1090	-.1310
169.000									.7630						
172.000							.8460								
180.000	1.4840	1.1010	.4710	.2170	.2260	.3010			.9820		-.0840	-.0870	-.0690	-.1220	-.1410

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0260							-.1440		-.1240
40.000	-.0800	-.0170		-.1080	-.0930	-.1450	-.1230			-.1150
70.000		-.0410	-.0690	-.0680	-.0500	-.0380	-.0650	-.0740		
90.000		-.0340	-.0520	-.0250	-.0280	-.0310	-.0580	-.0740		
105.000				.0140	-.0430	-.0320	-.0730	-.0780		
110.000									-.0840	
120.000		-.0470	-.0460	.1610	.0190	-.1140	-.1050	-.0960	-.0840	
135.000				.5160	.3570	-.0690	-.0870	-.0810		
150.000		-.1240	-.1280	-.0690	.0490	-.0230	-.0210	-.0510		
165.000		-.1110		-.0160	.1320	.0250	-.0450	-.0840		
180.000		-.1490	-.1150	-.0530						

MACH (2) = 2.999 BETAT (1) = -8.590

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5720	.8630	.3490	.0440	.0170	.0870			.2030		.0820	.0580	.0640	.0000	-.0100
20.000			.4450	.0370	.0090	.1050			.2930		.1020				
40.000			.6190	.0960	.0770	.1780			.2530		.1750	.1040	.0280	.0460	.0260
55.000			.7090	.1720	.1740	.2280			.4540		.3270				
70.000			.7790	.2230	.1910	.2200			.2570		.4120	.1900	.0820	.0760	.0620
90.000		1.3560	.8040	.2840	.2040	.2130			.2500		.3440	.1750	.0910	.0680	.0440
120.000			.7630	.2820	.2660	.3030			.4200		.1980	.0490	.0640	.0430	.0230

AMES 87-707 IA9 O2A + S3 + T3 ORBITER FUSELAGE (RBNB05)

MACH (2) = 2.999 BETAT (1) = -8.590

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
142.000										.1820					
150.000			.6770	.2840	.2630	.3340			.9050		.0450	.0220	.0180	.0370	.0210
157.000								1.0410							
162.000									.9550						
165.000											.0680	.0140	.0250	.0400	.0310
169.000									.8560						
172.000							.9280								
180.000	1.3720	1.1380	.5000	.2360	.2210	.2850			1.0810		-.0490	-.0540	-.0380	-.0760	-.0930

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0410							-.0880		-.0940
40.000	.0490	.0910		.2380	.1890	.1360	.0540			-.0870
75.000		.0040	-.0280	-.0220	.0160	.0570	.0540	.0240		
90.000		.0200	-.0060	-.0030	.0830	.0970	.0910	.0620		
105.000				.1140	.1200	.1390	.0940	.0570		
110.000									.0850	
120.000		.0110	.0000	.3510	.2810	.1090	.0890	.0800	.0660	
135.000				.2890	.3260	.0010	.0070	.0040		
150.000		.0040	-.0030	.0650	.1000	-.0530	-.0210	.0310		
165.000		.0120		.0750	.1450	.0810	.1670	.0630		
180.000		-.1110	-.0960	-.0740						

MACH (2) = 2.999 BETAT (2) = -6.440

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.6030	.8690	.3570	.0310	.0210	.0660			.1450		.0950	.0690	.0650	.0060	-.0230
20.000			.4330	.0210	.0310	.0780			.2760		.1140				
40.000			.5820	.0790	.0680	.1570			.3090		.1650	.0940	.0300	.0210	.0060
55.000			.6600	.1120	.1350	.1760			.2140		.3050				
70.000			.7140	.1680	.1480	.1620			.1980		.3450	.1740	.0670	.0580	.0410
90.000		1.3180	.7430	.2410	.1620	.1750			.1750		.2120	.1390	.0810	.0460	.0260
120.000			.7200	.2810	.2340	.2620			.3610		.1610	.0190	.0290	.0410	.0110
142.000										.1490					
150.000			.6570	.2790	.2510	.3150			.8580		.0310	.0060	-.0040	.0150	.0100
157.000								1.0140							
162.000									.9240						
165.000											-.0020	-.0100	.0040	.0030	.0160
169.000									.8550						
172.000							.9530								

AMES 87-707 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RBNBUS)

MACH (2) = 2.999 BETAT (2) = -6.44

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.6030	1.1840	.5090	.2440	.2240	.2820			1.1040		-.0480	-.0560	-.0430	-.0500	-.0680
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0480							-.1220		-.0990					
40.000	.0150	.0530		.1960	.1470	.0730	.0110			-.0960					
75.000		-.0210	-.0430	-.0390	.0020	.0110	-.0010	.0030							
90.000		.0050	-.0260	-.0090	.0400	.0450	.0360	.0370							
105.000				.0590	.0710	.0440	.0470	.0350							
110.000									.0750						
120.000		-.0020	-.0110	.2720	.2320	.0270	.0480	.0550	.0430						
135.000				.2940	.3080	-.0110	-.0380	.0000							
150.000		-.0560	-.0100	.0660	.1150	-.0590	-.0380	.0210							
165.000		.0020		.0720	.1430	.0080	.1190	.0680							
180.000		-.0950	-.0710	-.0420											

MACH (2) = 2.999 BETAT (3) = -4.27

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6300	.8720	.3490	.0390	.0010	.0640			.1170		.0730	.0560	.0470	.0260	-.0050
20.000			.4090	.0310	.0130	.0670			.1590		.1570				
40.000			.5390	.0920	.0650	.1520			.1170		.1600	.0790	.0320	.0210	.0080
55.000			.6050	.1490	.0970	.1430			.1550		.2880				
75.000			.5550	.1760	.1190	.1290			.1500		.2520	.1400	.0510	.0420	.0230
90.000		1.2610	.5800	.2010	.1260	.1390			.1470		.1490	.0680	.0630	.0310	.0150
120.000			.6740	.2540	.2030	.2210			.2980		.1280	-.0090	-.0180	.0300	.0120
142.000										.1170					
150.000			.6380	.2530	.2390	.2910			.8080		.0150	-.0130	-.0220	-.0130	.0030
157.000								.9850							
162.000									.8950						
165.000											-.0170	-.0330	-.0130	-.0210	.0080
169.000									.8580						
172.000							.9600								
180.000	1.6300	1.1880	.5150	.2460	.2290	.2810			1.1250		-.0530	-.0570	-.0380	-.0350	-.0350
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0270							-.1090		-.0890					
40.000	-.0030	.0430		.1480	.0940	.0310	-.0200			-.1040					

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNBUS)

MACH (2) = 2.999 BETAT (3) = -4.27

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0280	-.0530	-.0500	-.0130	-.0140	-.0290	-.0180		
90.000		-.0130	-.0370	-.0240	.0000	.0170	.0110	.0120		
105.000				.0430	.0350	.0470	.0250	.0090		
110.000									.0570	
120.000		-.0100	-.0220	.2330	.1880	-.0030	.0440	.0310	.0280	
135.000				.3240	.2940	-.0050	-.0420	-.0130		
150.000		-.0120	-.0180	.0660	.1340	-.0530	-.0370	.0270		
165.000		-.0180		.0630	.1590	.1160	.1190	.0580		
180.000		-.0610	-.0640	.0000						

MACH (2) = 2.999 BETAT (4) = -2.11

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8430	.8780	.3450	.1230	.1440	.0470			.1050		.0470	.1010	.1040	.0570	-.0030
20.000			.3920	.0210	-.0460	.0370			.1430		.0880				
40.000			.4970	.0650	.0370	.1130			.0700		.1560	.0610	.0340	.0350	.0110
55.000			.5480	.2190	.0610	.1040			.1260		.2120				
75.000			.5830	.1270	.0700	.0950			.2080		.1420	.1050	.0330	.0180	.0050
90.000		1.1980	.6130	.1550	.0850	.0950			.0940		.1120	.0450	.0250	.0130	-.0030
120.000			.6210	.2170	.1570	.1690			.2560		.1610	-.0350	-.0390	.0030	-.0490
142.000										.0830					
150.000			.6130	.2190	.2190	.2620			.7450		-.1420	-.0330	-.0400	-.0350	-.0070
157.000								.9540							
162.000									.8620						
165.000											-.0350	-.0550	-.0340	-.0320	-.0090
169.000									.8580						
172.000							.9730								
180.000	1.8430	1.1990	.5180	.2460	.2280	.2760			1.1350		-.0630	-.0550	-.0410	-.0340	-.0330

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0380							-.1520		-.0940
40.000	-.0250	.0130		.0850	.0490	-.0150	-.0540			-.1170
70.000		-.0390	-.0640	-.0660	-.0410	-.0330	-.0460	-.0340		
90.000		-.0270	-.0480	-.0360	-.0220	-.0020	-.0060	-.0090		
105.000				.0220	.0070	.0030	-.0050	-.0110		
110.000									.0470	
120.000		-.0180	-.0280	.2130	.1450	-.0290	-.0380	.0080	.0040	
135.000				.3410	.2840	-.0290	-.0450	-.0170		
150.000		-.0150	-.0220	.0720	.1740	-.0370	-.0110	.0380		

AMES 87-7x7 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBx5)

MACH (2) = 2.999 BETAT (4) = -2.11x

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.738x	.7869	.8283	.8848	.9252	.9639	1.xx15	1.x392
PHI										
185.xxx		-.x15x		.x53x	.178x	.138x	.125x	.x48x		
18x.xxx		-.x28x	-.x23x	-.x18x						

MACH (2) = 2.999 BETAT (5) = 2.22x

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.xxxx	.x175	.x188	.x339	.x6x2	.1355	.15x6	.1581	.1732	.1958	.2259	.2711	.32xx	.3953	.512x
PHI															
.xxx	1.x39x	.87x	.391x	.x33x	-.xx1x	.x31x			.x99x		.x43x	.119x	.1x3x	.x64x	-.xx1x
2x.xxx			.391x	.x2xx	-.xx1x	.x2xx			.x86x		.x47x				
4x.xxx			.419x	.x27x	.xx2x	.x14x			.x47x		.x5xx	.x72x	.x59x	.x23x	-.x25x
55.xxx			.437x	.x36x	.x16x	.x37x			.x39x		.x6xx				
7x.xxx			.445x	.x35x	.x19x	.x39x			.x18x		.x64x	-.x14x	-.xxxx	-.x11x	-.x14x
9x.xxx		1.x43x	.471x	.x74x	.x21x	.x35x			.x47x		.x13x	-.x55x	-.x59x	-.xx7x	-.x21x
12x.xxx			.5x7x	.141x	.1xxx	.x98x			.111x		.x21x	-.x71x	-.x71x	-.x55x	-.x18x
142.xxx										.x35x					
15x.xxx			.535x	.192x	.181x	.225x			.x17x		-.xx2x	-.x69x	-.x64x	-.x53x	-.x41x
157.xxx								.9x7x							
162.xxx									.811x						
165.xxx											-.x6xx	-.x73x	-.x55x	-.x4xx	-.x4xx
169.xxx									.848x						
172.xxx							.98xx								
18x.xxx	1.x39x	1.2x9x	.516x	.229x	.228x	.281x			1.119x		-.x65x	-.x54x	-.x4xx	-.x35x	-.x33x

X/LB	.5873	.6626	.738x	.7869	.8283	.8848	.9282	.9639	1.xx15	1.x392
PHI										
.xxx	-.x37x							-.119x		-.x95x
4x.xxx	-.x9xx	-.x32x		.x16x	-.x36x	-.x58x	-.x89x			-.1x9x
7x.xxx		-.x49x	-.x88x	-.x67x	-.x47x	-.x58x	-.x67x	-.x45x		
9x.xxx		-.x33x	-.x53x	-.x29x	-.x23x	-.x28x	-.x47x	-.x36x		
1x5.xxx				.x27x	-.xx6x	-.x36x	-.x47x	-.x37x		
11x.xxx									-.x33x	
12x.xxx		-.x14x	-.x2xx	.x91x	.x62x	-.x71x	-.x73x	-.x31x	-.x15x	
135.xxx				.314x	.316x	-.x4xx	-.x39x	-.xx4x		
15x.xxx		-.xxxx	-.xx7x	.151x	.336x	.x18x	.x31x	.x43x		
165.xxx		-.x15x		.x13x	.192x	.174x	.x86x	.x58x		
18x.xxx		-.x28x	-.x24x	-.x15x						

AMES 87-737 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBUS)

MACH (2) = 2.999 BETAT (6) = 4.37%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6150	.9680	.3430	.0210	-.0050	.0680			.1150		.0700	.0660	.0590	.0280	-.0020
2.000			.3430	.0170	-.0160	.0570			.0820		.0230				
4.000			.3770	.0060	-.0130	.0230			.0590		.0270	.0830	.0640	-.0020	-.0390
55.000			.3860	.0190	-.0180	.0130			.0170		.0510				
7.000			.3890	.0210	-.0170	.0160			-.0120		.0400	-.0300	-.0270	-.0120	-.0170
9.000		.9680	.4070	.0440	-.0040	.0310			.0420		-.0190	-.0740	-.0740	-.0260	-.0180
12.000			.4530	.1160	.0770	.0820			.0840		-.0020	-.0810	-.0840	-.0780	-.0240
142.000										.0170					
150.000			.4990	.1760	.1630	.2540			.0590		-.0320	-.0800	-.0790	-.0590	-.0520
157.000								.8460							
162.000									.7960						
165.000											-.0740	-.0780	-.0510	-.0430	-.0560
169.000									.8450						
172.000							.9340								
180.000	1.6150	1.1900	.5480	.2400	.2250	.2750			1.1160		-.0570	-.0520	-.0390	-.0370	-.0400

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.1900		-.0850
40.000	-.0810	-.0350		-.0420	-.0340	-.0790	-.1050			-.0820
70.000		-.0480	-.0620	-.0620	-.0480	-.0360	-.0490	-.0490		
90.000		-.0290	-.0460	-.0270	-.0150	-.0220	-.0390	-.0420		
105.000				.0250	-.0120	-.0220	-.0390	-.0420		
110.000									-.0130	
120.000		-.0150	-.0190	.0620	.0450	-.0690	-.0690	-.0490	-.0310	
135.000				.5110	.3250	-.0310	-.0350	-.0220		
150.000		-.0190	-.0190	.1020	.3800	.0320	.0190	.0290		
165.000		-.0490		.0240	.2450	.1290	.0550	.0330		
180.000		-.0640	-.0630	-.0270						

MACH (2) = 2.999 BETAT (7) = 6.53%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5930	.8640	.3430	.0420	.0070	.0720			.1470		.0920	.0890	.0630	.0040	-.0190
20.000			.3350	-.0110	-.0260	.0610			.1060		.0540				
40.000			.3470	-.0090	-.0170	.0360			.0480		-.0080	.0170	.0110	-.0300	-.0520
55.000			.3430	-.0260	-.0330	.0020			.0200		.0480				
70.000			.3320	-.0090	-.0370	-.0020			-.0160		.0290	-.0350	-.0600	-.0180	-.0290
90.000		.8930	.3490	.0150	-.0270	-.0260			-.0140		-.0480	-.0830	-.0760	-.0520	-.0230
120.000			.4010	.0870	.0520	.0530			.0430		-.0250	-.0910	-.0970	-.0880	-.0350

AMES 87-757 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNBUS)

MACH (2) = 2.999 BETAT (7) = 6.53

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
142.500										-.0180					
150.000			.4820	.1550	.1440	.1830			.5540		-.1400	-.1090	-.0780	-.0640	-.0920
157.500								.8420							
162.500									.7840						
165.000											-.1070	-.0780	-.0560	-.0580	-.0730
180.000									.8350						
172.500							.8680								
180.000	1.5930	1.1730	.4990	.2290	.2230	.2670			1.0990		-.0590	-.0540	-.0470	-.0440	-.0750

X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9262	.9539	1.0015	1.0392
PHI										
.000	-.0500							-.1150		-.0870
45.000	-.0720	-.1420		-.0340	-.0520	-.0690	-.1120			-.0750
75.000		-.1480	-.1810	-.0580	-.0480	-.0380	-.0550	-.0570		
90.000		-.1270	-.1460	-.1250	-.1210	-.1290	-.1430	-.1470		
105.000				.0080	-.0350	-.0390	-.0550	-.0530		
115.000									-.1290	
120.000		-.0130	-.1270	.1530	.0380	-.1810	-.0780	-.0650	-.0560	
135.000				.4480	.3340	-.0360	-.0540	-.1410		
150.000		-.1860	-.1630	.0120	.1520	.0150	.0450	.0270		
165.000		-.0790		-.1050	.1390	.0610	-.0010	-.0320		
180.000		-.1520	-.0770	-.0440						

MACH (2) = 2.999 BETAT (8) = 8.70

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.5080	.0850	.3470	.0000	.0210	.0680			.1930		.0780	.0820	.0680	.0000	-.0120
22.500			.3250	-.0110	.0090	.0560			.1980		.0420				
30.000			.3250	-.0180	-.0190	.0180			.1260		-.1080	-.1410	-.0580	-.0780	-.0870
55.000			.3080	-.0220	-.0370	.0110			.1950		.0420				
75.000			.2890	-.0220	-.0490	-.0140			.1220		.0190	-.0430	-.0630	-.0390	-.0410
90.000		.0290	.2990	-.0480	-.0440	-.0170			-.0080		-.0530	-.0870	-.0830	-.0720	-.0340
120.000			.3800	.0650	.0320	.0300			.1240		-.0460	-.1090	-.1120	-.0980	-.0560
142.500										-.0230					
150.000			.4300	.1390	.1300	.1470			.4550		-.0350	-.0990	-.0870	-.0690	-.0580
157.500								.7250							
162.500									.7660						
165.000											-.1010	-.0850	-.0650	-.0840	-.0920
180.000									.8250						
172.500							.8030								

AMES 97-757 IA9 02A + 33 + 79 ORBITER FUSELAGE (RUN 13)

MACH (2) = 2.999 BETAT (8) = 8.7

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1956	.1581	.1732	.1958	.2259	.2711	.3216	.3953	.5125
PHI															
180.000	1.3886	1.1576	.4926	.2206	.2156	.2506			1.1686		-.1486	-.1556	-.1556	-.1826	-.1936
X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.1446							-.1946		-.1996					
45.000	-.1026	-.1856		-.1376	-.1296	-.1606	-.1956			-.1886					
75.000		-.1926	-.1596	-.1826	-.1526	-.1256	-.1476	-.1596							
90.000		-.1376	-.1456	-.1426	-.1236	-.1246	-.1426	-.1596							
105.000				-.1466	-.1296	-.1246	-.1586	-.1616							
115.000									-.1236						
120.000		-.1386	-.1486	.1166	.1256	-.1686	-.1826	-.1796	-.1676						
135.000				.2426	.3576	-.1426	-.1526	-.1816							
150.000		-.1116	-.1196	-.0776	-.1136	-.1296	-.1516	-.1586							
165.000		-.1196		-.0416	.0426	-.1256	-.1516	-.1816							
180.000		-.1216	-.1166	-.0796											

MACH (3) = 3.962 BETAT (1) = -5.7

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1956	.1581	.1732	.1958	.2259	.2711	.3216	.3953	.5125
PHI															
.000	.0000	.0000	.0000	.0226	-.0136	.0796			.1776		.1186	.0586	.0516	.0396	.0226
22.500			.4716	.0536	-.0076	.0876			.1286		.1516				
45.000			.0516	.1516	.0826	.1386			.2476		.2226	.1356	.0836	.0216	.0046
90.000			.7126	.2486	.1816	.1646			.2256		.3656				
75.000			.0186	.2716	.1996	.1696			.2216		.3246	.2256	.1186	.0936	.0716
90.000		.0000	.8536	.3086	.2196	.2196			.2546		.2386	.1356	.1226	.0926	.0576
120.000			.0486	.3336	.2776	.3096			.4126		.2246	.1626	.0926	.0556	.0356
142.500										.2196					
150.000			.7116	.2896	.2756	.3386			.9536		.0716	.0426	.0256	.0256	.0166
157.500								1.0896							
162.000									1.0436						
165.000											.0446	.0326	.0326	.0156	.0296
169.000									.9526						
172.500							.9826								
180.000	.0000	.0000	.5226	.2456	.2276	.2596			1.1726		-.0146	-.0276	-.0326	-.0376	-.0786
X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0186							-.0796		-.1046					
.000	.1826	.0346		.1976	.1726	.1506	.0716			-.0946					

AMES 67-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB05)

MACH (3) = 3.502 BETAT (1) = -8.750

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		.0480	-.0240	-.0180	.0010	.0520	.0410	.0330		
90.000		.0220	-.0420	.0030	.0570	.0810	.0890	.0770		
105.000				.0860	.0920	.1210	.1070	.0760		
110.000									.0800	
120.000		.0060	-.0060	.3050	.2880	.0810	.0860	.0910	.0810	
135.000				.2760	.3230	.0120	-.0030	.0120		
150.000		.0050	.0000	.0650	.1090	-.0350	-.0180	.0120		
165.000		.0140		.0690	.1250	.0680	.1430	.0650		
180.000		-.0930	-.0860	-.0760						

MACH (3) = 3.502 BETAT (2) = -6.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0170	.0050	.0730			.1430		.0890	.0870	.0630	.0280	.0000
20.000			.4450	.0380	-.0120	.0780			.1060		.1580				
40.000			.6030	.1200	.0540	.1410			.0910		.2210	.1110	.0620	.0270	.0170
55.000			.6290	.1950	.1420	.1280			.1730		.3220				
70.000			.7470	.2250	.1600	.1460			.1610		.2060	.1740	.1010	.0740	.0520
90.000		.0000	.7820	.2590	.1750	.1760			.1440		.1780	.0690	.1020	.0690	.0390
120.000			.7560	.2990	.2440	.2640			.3440		.1680	.0400	.0290	.0410	.0240
142.000										.1730					
150.000			.6850	.2780	.2580	.3130			.8880		.0550	.0280	.0070	.0020	.0010
157.000								1.0570							
162.000									1.0070						
165.000											.0320	.0100	.0140	-.0010	.0100
169.000									.9510						
172.000							.9790								
180.000	.0000	.0000	.5290	.2480	.2300	.2690			1.1990		-.0150	-.0240	-.0280	-.0440	-.0540

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0320							-.0850		-.0840
40.000	.0100	.0080		.1600	.1290	.0740	.0420			-.0640
70.000		-.0080	-.0360	-.0310	-.0120	.0280	.0140	.0060		
90.000		.0080	-.0180	-.0150	.0240	.0480	.0540	.0480		
105.000				.0550	.0580	.0630	.0660	.0510		
110.000									.0570	
120.000		-.0020	-.0150	.2560	.2350	.0640	.0330	.0670	.0580	
135.000				.2590	.2960	.0010	-.0130	-.0010		
150.000		-.0080	-.0100	.0550	.1090	-.0370	-.0180	.0020		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB05)

MACH (3) = 3.502 BETAT (2) = -6.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		.0630		.0540	.1200	.0870	.1290	.0600		
180.000		-.0790	-.0650	-.0530						

MACH (3) = 3.502 BETAT (3) = -4.350

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0582	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3264	.3953	.5125
PHI															
.000	.0000	.0000	.0000	.0140	.0140	.0550			.1060		.0510	.0780	.0720	.0350	.0110
20.000			.4230	.0260	.0160	.0580			.0790		.1220				
40.000			.5550	.0930	.0290	.1030			.0690		.2330	.1040	.0560	.0210	.0070
55.000			.5940	.1520	.1010	.1070			.1300		.1550				
70.000			.6750	.1790	.1260	.1160			.1180		.1460	.0910	.0810	.0490	.0330
90.000		.0000	.7110	.2130	.1350	.1380			.1110		.1340	.0340	.0370	.0510	.0240
125.000			.6990	.2520	.2090	.2210			.2830		.1350	.0150	-.0140	.0020	.0120
142.000										.1460					
150.000			.6570	.2580	.2490	.2840			.8290		.0390	.0690	-.0090	-.0140	-.0090
157.000								1.0260							
162.000									.9680						
165.000											.0160	-.0190	-.0040	-.0170	-.0120
169.000									.9410						
172.000							.9890								
180.000	.0000	.0000	.5320	.2510	.2320	.2710			1.2130		-.0210	-.0340	-.0300	-.0270	-.0450

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0170							-.0660		-.0730
40.000	-.0040	-.0180		.1120	.0960	.0380	.0130			-.0770
70.000		-.0190	-.0470	-.0410	-.0270	-.0030	-.0140	-.0150		
90.000		-.0680	-.0320	-.0260	-.0020	.0180	.0220	.0190		
105.000				.0360	.0330	.0310	.0300	.0230		
110.000									.0280	
120.000		-.0130	-.0220	.2250	.1920	.0320	.0040	.0250	.0310	
135.000				.2810	.2810	-.0070	-.0210	-.0090		
150.000		-.0180	-.0180	.0550	.1270	-.0330	-.0180	-.0060		
165.000		-.0090		.0380	.1310	.1090	.1320	.0640		
180.000		-.0540	-.0310	-.0070						

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB05)

MACH (3) = 3.502 BETAT (4) = -2.140

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0450	.0060	.0270			.0840		.0530	.0790	.0850	.0610	.0210
20.000			.4010	.0680	.0190	.0310			.0490		.0760				
40.000			.5120	.0720	.0500	.0970			.0430		.1420	.0970	.0440	.0210	.0180
55.000			.5240	.1170	.0750	.0830			.1050		.1030				
70.000			.6070	.1400	.0840	.0890			.0930		.1160	.0440	.0460	.0310	.0160
90.000		.0000	.6390	.1760	.1010	.1040			.0740		.1130	.0130	-.0070	.0310	.0080
120.000			.6450	.2280	.1760	.1810			.2330		.1000	-.0070	-.0270	-.0180	-.0020
142.000										.1100					
150.000			.6250	.2410	.2230	.2600			.7640		.0250	-.0080	-.0240	-.0290	-.0240
157.000								.9930							
162.000									.9310						
165.000											.0000	-.0220	-.0220	-.0270	-.0310
169.000									.9340						
172.000							1.0100								
180.000	.0000	.0000	.5350	.2510	.2310	.2680			1.2170		-.0280	-.0310	-.0270	-.0260	-.0330

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0130							-.0650		-.0760
40.000	-.0450	-.0190		.0600	.0260	.0000	-.0200			-.0870
70.000		-.0310	-.0560	-.0550	-.0440	-.0190	-.0320	-.0280		
90.000		-.0210	-.0440	-.0360	-.0180	-.0010	.0010	.0010		
105.000				.0160	.0070	.0130	.0020	-.0020		
115.000									.0250	
120.000		-.0180	-.0270	.2160	.1480	.0150	-.0160	-.0080	.0110	
135.000				.3040	.2740	-.0120	-.0230	-.0080		
150.000		-.0180	-.0190	.0520	.1480	-.0200	-.0110	.0110		
165.000		-.0170		.0330	.1350	.1290	.1160	.0660		
180.000		-.0330	-.0280	-.0040						

MACH (3) = 3.502 BETAT (5) = 2.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0540	.0160	.0270			.0830		.0560	.0740	.0720	.0620	.0160
20.000			.4490	.0610	.0110	.0250			.0500		.0520				
40.000			.4650	.0720	.0240	.0350			.0320		.0540	.0220	.0640	.0240	-.0070
55.000			.4680	.0710	.0420	.0420			.0500		.0260				
70.000			.4650	.0650	.0320	.0470			.0420		.0530	-.0120	-.0410	-.0040	-.0080
90.000		.0000	.4940	.0890	.0400	.0490			.0220		.0290	-.0360	-.0410	-.0410	-.0190
120.000			.5280	.1590	.1150	.1170			.1080		.0390	-.0470	-.0530	-.0530	-.0310

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB05)

MACH (3) = 3.502 BETAT (5) = 2.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.1000	.0675	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0640					
150.000			.5530	.2620	.1850	.2190			.6320		.0020	-.0460	-.0470	-.0430	-.0460
157.000								.9480							
162.000									.8780						
165.000											-.0340	-.0500	-.0380	-.0330	-.0390
169.000									.9140						
172.000							1.0050								
180.000	.0000	.0000	.5310	.2440	.2300	.2690			1.2010		-.0380	-.0360	-.0260	-.0270	-.0360

X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392
PHI										
.000	-.0150							-.0650		-.0770
40.000	-.0320	-.0360		.0180	-.0290	-.0450	-.0550			-.0930
75.000		-.0450	-.0620	-.0590	-.0510	-.0360	-.0570	-.0440		
90.000		-.0320	-.0500	-.0400	-.0240	-.0260	-.0310	-.0360		
105.000				.0170	.0450	-.0130	-.0310	-.0360		
115.000									-.0220	
120.000		-.0240	-.0260	-.0880	.0610	-.0140	-.0430	-.0320	-.0220	
135.000				.2500	.2990	-.0020	-.0150	-.0440		
150.000		-.0280	-.0190	.1120	.3180	.0450	.0200	.0330		
165.000		-.0360		.0110	.1510	.1720	.0950	.0530		
180.000		-.0320	-.0280	-.0690						

MACH (3) = 3.502 BETAT (6) = 4.450

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.1000	.0675	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1959	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0320	.0170	.0480			.1030		.0530	.0820	.0800	.0430	.0140
20.000			.3540	.0240	.0050	.0360			.0740		.0370				
40.000			.3940	.0160	.0060	.0330			.0340		.0190	.0110	.0540	.0180	-.0300
55.000			.3960	.0320	.0030	.0250			.0300		.0160				
75.000			.4030	.0380	.0010	.0240			.0000		.0250	-.0210	-.0520	-.0160	-.0160
90.000		.0000	.4270	.0610	.0120	.0240			-.0060		-.0110	-.0540	-.0620	-.0550	-.0150
120.000			.4730	.1300	.0900	.0860			.0630		.0160	-.0580	-.0660	-.0650	-.0470
142.000										.0410					
150.000			.5170	.1820	.1690	.2000			.5660		-.0680	-.0560	-.0540	-.0480	-.0500
157.000								.8960							
162.000									.8660						
165.000											-.0510	-.0550	-.0360	-.0340	-.0500
169.000									.9120						
172.000							.9370								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB05)

MACH (3) = 3.502 BETAT (6) = 4.46

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	.0000	.0000	.5280	.2410	.2270	.2600			1.1880		-.0320	-.0360	-.0280	-.0290	-.0460

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0220							-.0670		-.0740
40.000	-.0450	-.0490		-.0140	-.0460	-.0520	-.0720			-.0790
70.000		-.0450	-.0640	-.0600	-.0520	-.0350	-.0440	-.0440		
90.000		-.0310	-.0450	-.0370	-.0190	-.0180	-.0350	-.0400		
105.000				.0210	-.0130	-.0180	-.0370	-.0390		
110.000									-.0170	
120.000		-.0240	-.0250	.0560	.0400	-.0470	-.0560	-.0450	-.0400	
135.000				.4510	.2980	-.0180	-.0290	-.0190		
150.000		-.0410	-.0320	.0650	.2910	.0210	.0120	.0230		
165.000		-.0540		.0110	.1440	.0890	.0420	.0140		
180.000		-.0570	-.0560	-.0120						

MACH (3) = 3.502 BETAT (7) = 6.66

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0090	-.0150	.0660			.1440		.0860	.0680	.0520	.0210	-.0060
20.000			.3430	-.0050	-.0250	.0600			.0910		.0300				
40.000			.3640	-.0010	-.0370	.0310			.0120		-.0050	-.0120	-.0030	-.0330	-.0490
55.000			.3610	.0070	-.0210	.0000			.0130		.0110				
70.000			.3450	.0120	-.0210	.0000			-.0160		-.0010	-.0360	-.0530	-.0290	-.0250
90.000		.0000	.3630	.0300	-.0090	.0010			-.0250		-.0360	-.0690	-.0760	-.0710	-.0500
120.000			.4180	.1000	.0630	.0660			.0310		-.0070	-.0650	-.0800	-.0810	-.0670
142.000										.0200					
150.000			.4750	.1620	.1480	.1820			.5050		-.0160	-.0610	-.0660	-.0620	-.0520
157.000								.8340							
162.000									.8490						
185.000											-.0610	-.0560	-.0490	-.0500	-.0670
169.000									.8990						
172.000							.8710								
180.000	.0000	.0000	.5170	.2320	.2210	.2490			1.1710		-.0260	-.0320	-.0400	-.0400	-.0660

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0370							-.0800		-.0890
40.000	-.0690	-.0830		-.0350	-.0470	-.0470	-.0830			-.0750

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (FBNBUS)

MACH (3) = 3.502 BETAT (7) = 6.660

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0520	-.0680	-.0630	-.0540	-.0260	-.0420	-.0430		
90.000		-.0330	-.0470	-.0390	-.0190	-.0270	-.0360	-.0450		
105.000				.0630	-.0260	-.0350	-.0450	-.0480		
110.000									-.0480	
120.000		-.0350	-.0330	.0770	.0300	-.0530	-.0620	-.0530	-.0440	
130.000				.2750	.2730	-.0230	-.0310	-.0240		
150.000		-.0540	-.0650	.0420	.0560	.0270	.0200	-.0020		
165.000		-.0790		-.0320	.0050	.0330	-.0270	-.0340		
180.000		-.0690	-.0730	-.0610						

MACH (3) = 3.502 BETAT (7) = 6.660

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0475	.0188	.0839	.1926	.1355	.1516	.1581	.1732	.1951	.2239	.2714	.3224	.3744	.4252
PHI															
.000	.0000	.0000	.0000	.0120	-.0220	.0520			.1580		.1140	.0900	.0470	.0330	-.0130
28.000			.3330	-.0650	-.0350	.0530			.2160		.0470				
40.000			.3340	-.0120	-.0470	.0240			.0360		-.0290	-.0470	-.0490	-.0470	-.0440
55.000			.3320	-.0690	-.0320	-.0150			-.0630		-.0270				
75.000			.2970	-.0310	-.0320	-.0130			-.0320		-.0250	-.0430	-.0470	-.0470	-.0330
90.000		.0000	.3310	.0470	-.0230	-.0190			-.0430		-.0570	-.0770	-.0790	-.0790	-.0580
120.000			.3710	.0720	.0430	.0380			.0270		-.0250	-.0750	-.0780	-.0760	-.0760
142.000										.0000					
150.000			.4300	.1410	.1350	.1480			.4420		-.0240	-.0760	-.0710	-.0650	-.0690
157.000								.7430							
162.000									.8240						
165.000											-.0580	-.0620	-.0630	-.0680	-.0710
169.000									.8650						
172.000							.7950								
180.000	.0000	.0000	.9070	.2240	.2170	.2330			1.1380		-.0200	-.0310	-.0460	-.0660	-.0760

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0820							-.0890		-.0910
40.000	-.0790	-.0790		-.0390	-.0340	-.0700	-.0810			-.0710
75.000		-.0580	-.0680	-.0580	-.0570	-.0210	-.0400	-.0430		
90.000		-.0480	-.0520	-.0480	-.0270	-.0320	-.0430	-.0520		
105.000				-.0160	-.0250	-.0380	-.0510	-.0540		
110.000									-.0790	
120.000		-.0520	-.0520	.0370	.0150	-.0580	-.0650	-.0600	-.0540	
135.000				.1350	.1910	-.0460	-.0560	-.0540		
150.000		-.0680	-.0930	-.0890	-.0410	-.0310	-.0500	-.0570		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB05)

MACH (3) = 3.502 BETAT (8) = 8.860

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0950		-.0630	-.0130	-.0310	-.0550	-.0720		
180.000		-.1040	-.0950	-.0780						

AMES 87-707 IA9 02A + 93 + T9 ORBITER FUSELAGE (RBNB06) (15 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500
ELEVR = .000
RUDFLR = .000

MACH (1) = 2.498 BETAT (1) = -8.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0475	.0188	.0339	.0502	.1355	.1506	.1561	.1732	.1958	.2259	.2711	.3266	.3953	.5125
PHI															
.000	1.4250	.9150	.4460	.0460	.0360	.2500			.1140		.0460	.0360	.0210	-.0330	-.0530
20.000			.5140	.0850	.0990	.2180			.1540		.0590				
40.000			.5470	.1710	.1450	.1930			.2010		.0930	.0330	.0080	-.0090	.0380
55.000			.5020	.2250	.1610	.4170			.3350		.2530				
70.000			.7340	.2350	.1670	.3440			.3920		.3490	.1120	.0240	.0220	.0250
90.000		1.2380	.7250	.2450	.1620	.2630			.3490		.3620	.1030	.0200	.0060	.0060
120.000			.5810	.2670	.2120	.2470			.4560		.2720	.0650	.1140	-.0120	-.0160
142.000										.2390					
150.000			.5990	.2180	.2110	.2920			.8310		.0180	.0220	.0090	.0030	-.0240
157.000								.9620							
162.000									.8220						
165.000											-.0460	.0110	.0420	.0140	-.0240
169.000									.7130						
172.000							.8820								
180.000	1.4250	1.0170	.4290	.1860	.1630	.2360			.9120		-.0970	-.0950	-.0670	-.1240	-.1490

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0270									
40.000	.1110	.0780		.2390	.1620	.1180	-.0140	-.1400		-.1250
70.000		-.0240	-.0310	-.0240	.0490	.0320	-.0010	.0000		-.1250
90.000		-.0650	-.0170	.0130	.0920	.0640	.0480	.0260		
105.000				.1260	.1540	.0640	.0320	.0090		
115.000									.0000	
120.000		-.0230	-.0350	.3780	.3280	.0890	.0310	.0230	.0190	
135.000				.2410	.2640	-.0440	-.0640	-.0470		
150.000		-.0400	-.0470	.0330	.0550	-.1030	-.0550	-.0110		
165.000		-.0360		.0620	.1260	.0640	.1380	.0410		
180.000		-.1320	-.1150	-.0470						

AMES 87-7U7 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU6)

MACH (1) = 2.498 BETAT (2) = -6.31U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.437U	.917U	.445U	.035U	.080U	.068U			.138U		.065U	.080U	.034U	-.023U	-.059U
2U.000			.507U	.065U	.096U	.158U			.161U		.059U				
40.000			.617U	.149U	.124U	.179U			.201U		.088U	.033U	-.003U	-.013U	.016U
55.000			.651U	.181U	.151U	.375U			.302U		.221U				
70.000			.669U	.181U	.138U	.254U			.367U		.286U	.094U	.008U	.002U	.003U
90.000		1.186U	.666U	.181U	.138U	.211U			.316U		.324U	.087U	.014U	-.008U	-.013U
120.000			.637U	.231U	.192U	.243U			.363U		.226U	.040U	-.006U	-.015U	-.032U
142.000										.098U					
150.000			.579U	.204U	.206U	.281U			.781U		.000U	-.016U	-.011U	-.009U	-.036U
157.000								.925U							
162.000									.791U						
165.000											-.059U	-.031U	.008U	.003U	-.033U
169.000									.715U						
172.000							.881U								
180.000	1.437U	1.038U	.431U	.189U	.177U	.264U			.936U		-.101U	-.100U	-.075U	-.094U	-.120U

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.043U							-.136U		-.103U
40.000	.085U	.078U		.192U	.116U	.071U	-.036U			-.140U
70.000		-.044U	-.057U	-.045U	-.008U	.003U	-.023U	-.018U		
90.000		-.027U	-.048U	-.007U	.052U	.040U	.015U	-.011U		
105.000				.182U	.110U	.039U	.011U	-.008U		
115.000									-.018U	
120.000		-.038U	-.046U	.292U	.245U	.044U	.013U	.014U	.001U	
135.000				.246U	.253U	-.032U	-.059U	-.037U		
150.000		-.042U	-.046U	.045U	.088U	-.097U	-.037U	.015U		
165.000		-.039U		.057U	.135U	.085U	.116U	.025U		
180.000		-.093U	-.078U	-.045U						

MACH (1) = 2.498 BETAT (3) = -4.19U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.455U	.898U	.415U	.055U	.034U	.018U			.132U		.115U	.092U	.067U	.002U	-.067U
20.000			.470U	.034U	.052U	.015U			.172U		.069U				
40.000			.562U	.155U	.078U	.043U			.216U		.075U	.031U	.004U	-.016U	-.012U
55.000			.587U	.140U	.106U	.172U			.269U		.197U				
70.000			.598U	.136U	.097U	.162U			.235U		.263U	.076U	-.011U	-.017U	-.021U
90.000		1.125U	.602U	.152U	.097U	.163U			.250U		.277U	.068U	.000U	-.027U	-.034U
120.000			.589U	.194U	.160U	.201U			.287U		.124U	.011U	-.015U	-.029U	-.047U

AMES 87-707 IA9 OEA + 1) + T9 ORBITER FUSELAGE (RBNBU6)

MACH (1) = 2.490 BETAT (3) = -4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0620					
150.000			.5500	.1880	.1960	.2600			.7350		-.0210	-.0520	-.0390	-.0260	-.0410
157.000								.8910							
162.000									.7580						
165.000											-.0760	-.0710	-.0460	-.0110	-.0380
169.000									.7170						
172.000							.8760								
180.000	1.4550	1.0450	.4330	.1900	.1860	.2620			.9490		-.1070	-.1040	-.0790	-.0590	-.0910

X/LB	.5873	.6625	.7380	.7969	.8283	.8848	.9252	.9539	1.0015	1.0392
PHI										
.000	-.0810							-.1230		-.1030
40.000	.0480	.0390		.1420	.0590	.0310	-.0370			-.1600
70.000		-.0640	-.0730	-.0650	-.0240	-.0160	-.0370	-.0350		
90.000		-.0480	-.0650	-.0130	.0270	.0060	-.0060	-.0230		
115.000				.0520	.0720	.0060	-.0030	-.0290		
110.000									-.0330	
120.000		-.0470	-.0530	.2040	.1900	.0670	-.0020	-.0020	-.0130	
135.000				.2720	.2570	-.0450	-.0470	-.0260		
150.000		-.0490	-.0480	.0720	.1340	-.0460	-.0460	.0470		
165.000		-.0440		.0720	.1960	.1180	.1160	.0150		
180.000		-.0690	-.0580	-.0420						

MACH (1) = 2.490 BETAT (4) = -2.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4630	.8680	.3850	-.1070	.0170	.1620			.1290		.1400	.1550	.0900	.0080	-.0720
20.000			.4320	.1690	.0210	.0660			.1910		.1110				
40.000			.5150	.0680	.0360	.0280			.2420		.0830	.0430	.0490	-.0090	-.0420
55.000			.5280	.0930	.0600	.1390			.2270		.1790				
70.000			.5310	.0690	.0570	.1160			.1460		.2430	.0630	-.0230	-.0310	-.0340
90.000		1.0880	.5350	.1070	.0560	.1160			.1410		.2310	.0510	-.0160	-.0400	-.0450
120.000			.5380	.1580	.1250	.1490			.2530		.0820	-.0410	-.0170	-.0390	-.0510
142.000										.0260					
150.000			.5240	.1730	.1770	.2330			.6810		-.0340	-.0740	-.0720	-.0350	-.0380
157.000								.8610							
162.000									.7280						
165.000											-.0880	-.0890	-.0670	-.0290	-.0370
169.000									.7260						
172.000							.8990								

AMES 87-757 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNB06)

MACH (1) = 2.498 BETAT (4) = -2.07

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.4830	1.0560	.4360	.1920	.1880	.2510			.9560		-.1160	-.0920	-.0850	-.0620	-.0360
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0940							-.1280		-.0850					
40.000	.0090	.0020		.0620	.0250	-.0120	-.1000			-.1390					
70.000		-.0760	-.0840	-.0750	-.0360	-.0350	-.0570	-.0490							
90.000		-.0550	-.0740	-.0180	-.0010	-.0140	-.0280	-.0360							
105.000				.0310	.0370	-.0030	-.0260	-.0410							
110.000									-.0460						
120.000		-.0550	-.0540	.1570	.1480	-.0040	-.0240	-.0110	-.0210						
135.000				.3120	.2780	-.0500	-.0390	.0030							
150.000		-.0380	-.0370	.1010	.1930	-.0460	.0090	.0500							
165.000		-.0370		.0920	.1890	.1250	.1050	.0040							
180.000		-.0340	-.0360	-.0340											

MACH (1) = 2.498 BETAT (5) = 2.17

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4570	.9010	.4150	.1630	.0450	.1050			.1250		.1300	.1240	.0800	.0050	-.0690
20.000			.4250	.1650	.0380	.0710			.1250		.1420				
40.000			.4480	.1270	.0280	.0240			.1240		.0880	.0640	.0410	-.0350	-.0780
55.000			.4390	.1290	.0130	.0410			.1480		.1550				
70.000			.4070	.0190	-.0060	.0500			.0560		.1590	.0250	-.0360	-.0440	-.0550
90.000		.9360	.4060	.1270	-.0090	.0360			.1130		.0500	-.0110	-.0300	-.0540	-.0590
120.000			.4330	.0920	.0640	.0710			.0990		.0080	-.0960	-.0870	-.0500	-.0420
142.000										-.0260					
150.000			.4570	.1330	.1420	.1910			.0660		-.0650	-.1100	-.1000	-.0670	-.0180
157.000								.8000							
162.000									.0720						
165.000											-.1110	-.1180	-.0920	-.0670	-.0130
180.000									.0710						
172.000							.8850								
180.000	1.4570	1.0500	.4330	.1840	.1910	.2510			.9410		-.1130	-.0930	-.0820	-.0620	-.0400
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0870							-.1180		-.0950					
40.000	-.0300	-.0210		-.0130	-.0510	-.0990	-.1230			-.0870					

AMES 87-767 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RDNB/6)

MACH (1) = 2.490 BETAT (5) = 2.17

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6828	.7380	.7899	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0720	-.0790	-.0780	-.0560	-.0560	-.0580	-.0650		
90.000		-.0680	-.0670	-.0240	-.0420	-.0310	-.0470	-.0540		
105.000				.0090	-.0210	-.0260	-.0540	-.0610		
110.000									-.0560	
120.000		-.0370	-.0450	.0960	.0570	-.0730	-.0610	-.0370	-.0340	
135.000				.3520	.2870	-.0730	-.0530	-.0130		
150.000		-.0270	-.0320	.1430	.3010	.0210	.0270	.0140		
165.000		-.0240		.0310	.2270	.1650	.0850	.0160		
180.000		-.0360	-.0380	-.0340						

MACH (1) = 2.490 BETAT (5) = 4.29

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0582	.1355	.1506	.1581	.1732	.1959	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4470	.8870	.4960	.0950	.0430	.0270			.1270		.0870	.0100	.0060	.0020	-.0630
20.000			.3970	-.0030	.0300	.0380			.1560		.1030				
40.000			.4020	.0440	.0290	-.0090			.1190		.1110	.0450	.0160	-.0590	-.0930
55.000			.3840	-.0010	-.0070	-.0060			.1220		.1380				
70.000			.3480	-.0010	-.0220	.0120			.0180		.0160	.0090	-.0380	-.0520	-.0670
90.000		.8700	.3480	-.0040	-.0320	-.0020			.0530		.0160	-.0530	-.0350	-.0560	-.0650
120.000			.3800	.0630	.0330	.0530			.0550		-.0220	-.0160	-.0110	-.0600	-.0370
142.000										-.0590					
150.000			.4240	.0190	.0110	.0710			.0470		-.0350	-.0270	-.0120	-.0380	-.0240
157.000								.7530							
180.000									.0570						
195.000											-.0260	-.0240	-.0090	-.0790	-.0480
180.000									.0710						
172.000							.8730								
180.000	1.4470	1.0490	.4290	.0830	.0840	.2440			.0930		-.0180	-.0510	-.0820	-.0640	-.0930

X/LB	.5873	.6828	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0720							-.1230		-.1110
40.000	-.0430	-.0370		-.0390	-.0680	-.1010	-.1340			-.0930
70.000		-.0730	-.0830	-.0810	-.0800	-.0630	-.0760	-.0750		
90.000		-.0580	-.0670	-.0270	-.0380	-.0490	-.0660	-.0770		
105.000				.0420	-.0340	-.0440	-.0710	-.0770		
110.000									-.0680	
120.000		-.0430	-.0510	.0750	.0280	-.1010	-.0880	-.0590	-.0510	
135.000				.4780	.2830	-.1000	-.0630	-.0480		
150.000		-.0320	-.0390	.1340	.3120	.0320	.0020	-.0090		

[illegible] 17 SEP 79 TABULATED PRESSURE DATA - IASC

AMES 87-7J7 IA9 ORA + 33 + T9 ORBITER FUSELAGE (0949,5)

MACH (1) = 2.495 BETA (6, = 4.29)

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

[illegible]

PHI

155.00)		-.147)		-.120)	.249)	.135)	.099)	.099)						
180.00)		-.177)	-.481)	-.440)										

MACH (1) = 2.496 BETA (7) = 6.41)

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0188	.0339	.0502	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5126
PHI															
.00)	1.4296	.8756	.3986	.1959	.1240	.2316			.1121)		.1340)	.1699)	.1120)	-.1189)	-.1639)
20.00)			.3696	-.1131)	.1211)	.1651)			.1199)		.1779)				
40.00)			.3816	-.1186)	.1126)	-.1256)			.1399)		.1111)	.1139)	-.1379)	-.1799)	-.1199)
55.00)			.3436	-.1186)	-.1376)	-.1256)			.1221)		.1649)				
70.00)			.3196	-.1336)	-.1456)	-.1246)			.1139)		.1511)	-.1211)	-.1469)	-.1699)	-.1756)
90.00)		.9886)	.2996	-.1226)	-.1436)	-.1226)			.1139)		-.1599)	-.1996)	-.1426)	-.1659)	-.1736)
120.00)			.3416)	.1396)	.1996)	.1116)			.1229)		-.1659)	-.1426)	-.1326)	-.1746)	-.1376)
142.00)										-.1786)					
150.00)			.3696)	.2156)	.1376)	.1426)			.1456)		-.1156)	-.1476)	-.1226)	-.1696)	-.1336)
157.00)								.7296)							
162.00)									.1476)						
165.00)											-.1526)	-.1376)	-.1156)	-.1936)	-.1146)
169.00)									.1756)						
172.00)							.9156)								
180.00)	1.4296)	1.1536)	.4236)	.1796)	.1786)	.2356)			.9166)		-.1196)	-.1166)	-.1036)	-.1886)	-.1316)
X/LB	.5873	.9825	.7336	.7888	.8283	.9348	.9652	.9838	1.0015	1.0392					
PHI															
.00)	-.1436)							-.1316)		-.1196)					
40.00)	-.1396)	-.1256)		-.1576)	-.1996)	-.1196)	-.1336)			-.1576)					
70.00)		-.1836)	-.1826)	-.1876)	-.1476)	-.1826)	-.1836)	-.1826)							
90.00)		-.1926)	-.1686)	-.1356)	-.1436)	-.1486)	-.1896)	-.1816)							
110.00)				-.1146)	-.1556)	-.1476)	-.1766)	-.1876)							
120.00)									-.1816)						
127.00)		-.1916)	-.1986)	.1186)	.1126)	-.1126)	-.1696)	-.1696)	-.1776)						
139.00)				.4826)	.2996)	-.1656)	-.1786)	-.1766)							
150.00)		-.1946)	-.1816)	.1996)	.2846)	.1116)	.1956)	-.1326)							
165.00)		-.1826)		-.1336)	.1996)	.1936)	.1156)	-.1426)							
180.00)		-.1176)	-.1086)	-.1266)											

AMES 87-7\7 IA9 OA + 33 + T9 ORBITER FUSELAGE (RUN 6)

MACH (1) = 2.499 BETAT (8) = 8.54

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0198	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2239	.2711	.3216	.3953	.5125
PHI															
.000	1.4140	.9888	.3840	.0188	.0340	.2740			.0921		.0331	.0522	-.0078	-.0490	-.0592
21.000			.3720	-.0020	.0208	.1670			.0650		.0160				
42.000			.3520	-.0150	-.0080	-.0430			.0260		-.0592	-.0610	-.0730	-.1040	-.1260
63.000			.3140	-.0350	-.0410	-.0230			.0080		.0310				
84.000			.2650	-.0350	-.0520	-.0270			.0190		.0460	-.0410	-.0460	-.0780	-.0940
90.000		.7520	.2210	-.0530	-.0140	-.0420			-.0050		-.0130	-.0280	-.0370	-.0720	-.0740
126.000			.2380	-.0140	-.0210	-.0340			-.0120		-.0250	-.0470	-.0490	-.0780	-.0840
142.000										-.0850					
150.000			.3540	.0380	.0290	.0190			.0420		-.0120	-.0480	-.0320	-.0940	-.0990
157.000								.0390							
192.000									.0320						
185.000											-.0280	-.0350	-.0120	-.0290	-.0460
189.000									.0590						
172.000							.7400								
180.000	2.4140	1.1020	.4130	.1750	.1390	.2510			.0550		-.0770	-.0190	-.0340	-.0420	-.0540

X/LB	.5075	.5826	.7330	.7550	.8282	.8548	.9252	.9439	1.0015	1.0350
PHI										
.000	-.0380							-.1410		-.1220
40.000	-.1050	-.1410		-.1220	-.1090	-.1390	-.1220			-.1110
70.000		-.1060	-.1370	-.1280	-.1270	-.1580	-.1640	-.1990		
90.000		-.0810	-.1060	-.1480	-.1480	-.1520	-.1740	-.1990		
105.000				-.1230	-.1620	-.1520	-.1260	-.1590		
110.000									-.1120	
120.000		-.1830	-.1610	.1370	.0270	-.1190	-.1110	-.1170	-.1990	
135.000				.4750	.3250	-.0990	-.0950	-.1030		
150.000		-.1290	-.1370	-.0940	-.1260	-.1530	-.1530	-.1740		
165.000		-.1380		-.1770	.0110	.0120	-.1540	-.2140		
180.000		-.1990	-.1240	-.1990						

MACH (2) = 2.999 BETAT (1) = -8.39

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0198	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2239	.2711	.3216	.3953	.5125
PHI															
.000	1.9030	.8340	.3680	.0410	.0290	.0490			.1840		.0720	.0490	.0580	-.0030	-.0140
21.000			.4390	.0610	.0310	.0720			.2590		.0990				
42.000			.3040	.1430	.0930	.2080			.2220		.1620	.0970	.0240	.0270	.0140
63.000			.3090	.2230	.1630	.2210			.2060		.2930				
84.000			.2440	.2420	.1740	.2150			.2390		.3790	.1890	.0730	.0570	.0460
90.000		1.2980	.2580	.2640	.1820	.2580			.2390		.3530	.1590	.0770	.0490	.0230
126.000			.2740	.2810	.2320	.2690			.3830		.3810	.2590	.0530	.0180	.0030

AMES 87-7/7 IA9 C2A + S3 + T9 ORBITER FUSELAGE (PSNDL6)

MACH (2) = 2.999 BETA (1) = -9.5%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

Y/LB	.0000	.0075	.0150	.0339	.0502	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5125
PHI															
142.000										.1552					
19.000			.5181	.2401	.2291	.2991			.8251		.0341	.0151	.0091	.0101	.0041
137.000								.9491							
192.000									.8551						
165.000											.0011	.0071	.0091	.0391	.0161
199.000									.7781						
172.000							.8621								
19.000	1.5191	1.0481	.4491	.2411	.1841	.2281			.9991		-.0521	-.0591	-.0521	-.0831	-.1191
A/_B	.3873	.6825	.7381	.7861	.9283	.9848	.9282	.9639	1.0015	1.0392					
PHI															
.000	-.1471							-.1151		-.0571					
4.000	.0481	.0831		.2221	.1831	.1991	.0351			-.0241					
7.000		-.0111	-.0391	-.0791	-.0921	.0271	.0171	.0121							
9.000		.0481	-.0261	-.0431	.0691	.0981	.0551	.0321							
15.000				.0221	.0991	.1161	.0541	.0451							
11%.000									.1991						
12.000		-.0111	-.0181	.3371	.2591	.0751	.0331	.0591	.0411						
135.000				.2431	.2221	-.0241	-.0391	-.0141							
15.000		-.0111	-.0221	.0321	.0461	-.0211	-.0311	-.0211							
165.000		-.0081		.0421	.0131	.0341	.0191	.0431							
18.000		-.0121	-.0491	-.0781											

MACH (2) = 2.999 BETA (2) = -9.4%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

Y/LB	.0000	.0075	.0150	.0339	.0502	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5125
PHI															
.000	1.5221	.8321	.3381	.2331	.1991	.1831			.1451		.0831	.0541	.0991	.0991	-.0231
2.000			.4131	.2091	.2171	.1791			.2881		.0991				
4.000			.3581	.1121	.0541	.1521			.2451		.1511	.0891	.0241	.0111	-.0041
55.000			.6321	.1781	.1291	.1381			.3161		.2711				
7.000			.6091	.1391	.1341	.1531			.1651		.3231	.1591	.0581	.0411	.0221
9.000		1.2491	.6991	.2291	.1421	.1571			.1691		.2391	.1321	.0691	.0331	.0091
12.000			.9811	.2511	.2411	.2311			.3241		.1431	.0131	.0291	.0171	-.0081
142.000										.1271					
19.000			.5941	.2241	.2111	.2721			.7891		.0171	-.0241	-.0171	.0231	-.0111
137.000								.9221							
192.000									.8421						
165.000											-.0131	-.0211	-.0111	-.0111	.0041
199.000									.7761						
172.000							.8621								

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBW6)

MACH (2) = 2.999 BETAT (2) = -6.43

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5125
PHI															
180.000	1.3225	1.0795	.4525	.2030	.1880	.2380			1.0490		-.0550	-.0630	-.0530	-.0680	-.0820

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0540							-.1580		-.0920
40.000	.0120	.0530		.1820	.1430	.0730	.0130			-.0990
70.000		-.0390	-.0590	-.0500	-.0190	.0010	-.0150	-.0130		
90.000		-.0140	-.0370	-.0350	.0240	.0350	.0280	.0250		
105.000				.0530	.0600	.0350	.0330	.0210		
110.000									.0640	
120.000		-.0210	-.0310	.2480	.2050	.0240	.0330	.0370	.0270	
135.000				.2230	.2580	-.0360	-.0480	-.0180		
150.000		-.0220	-.0360	.0370	.0750	-.0790	-.0520	-.0930		
165.000		-.0190		.0440	.0160	.0590	.0540	.0320		
180.000		-.1990	-.0800	-.0380						

MACH (2) = 2.999 BETAT (3) = -4.27

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5125
PHI															
.000	1.5470	.8460	.4050	.0370	.0120	.0240			.1540		.0770	.0770	.0450	.0370	-.0160
20.000			.4390	.0630	.0170	.0190			.1460		.0960				
40.000			.5240	.0990	.0720	.1220			.0970		.1430	.0750	.0250	.0000	.0000
55.000			.5800	.1090	.1540	.1340			.1550		.2440				
70.000			.6170	.1490	.0990	.1220			.1410		.2440	.1300	.0490	.0210	.0020
90.000		1.1980	.5380	.1790	.1570	.1340			.1160		.1480	.0890	.0480	.0140	-.0070
120.000			.6180	.2220	.1730	.1990			.2680		.1120	-.0110	-.0210	.0100	-.0190
142.000										.0950					
150.000			.5750	.2130	.1990	.2520			.7320		.0040	-.0240	-.0360	-.0220	-.0160
157.000								.9010							
162.000									.8130						
165.000											-.0260	-.0410	-.0280	-.0330	-.0070
169.000									.7790						
172.000							.8730								
180.000	1.5470	1.1000	.4590	.2090	.1990	.2390			1.0280		-.0600	-.0640	-.0560	-.0590	-.0500

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0380							-.1090		-.0870
40.000	-.0480	.0400		.1320	.0930	.0350	-.0150			-.1070

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AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBL6)

MACH (2) = 2.999 BETAT (3) = -4.27

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6828	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0425	-.0886	-.0646	-.0310	-.0210	-.0370	-.0320		
90.000		-.0395	-.0511	-.0380	-.0170	.0030	-.0030	-.0040		
105.000				.0210	.0250	.0310	.0110	-.0010	.0370	
110.000									.0210	
120.000		-.0290	-.0040	.1970	.1620	-.0120	.0000	.0150		
135.000				.2390	.2540	-.0450	-.0550	-.0280		
150.000		-.0290	-.0330	.0460	.1120	-.0650	-.0430	.0040		
165.000		-.0240		.0470	.1220	.0840	.0880	.0300		
180.000		-.0710	-.0840	-.0270						

MACH (2) = 2.999 BETAT (4) = -2.11

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5000	.8440	.3380	.1360	.0080	.0220			.1030		.0940	.1070	.1080	.0490	-.0150
2.000			.3800	.1360	-.0040	.0120			.1110		.0930				
4.000			.4800	.0660	.0380	.0190			.0560		.1470	.0820	.0330	.0280	.0000
55.000			.5270	.1030	.0590	.0980			.1370		.2180				
75.000			.5540	.1150	.0620	.0990			.1020		.1450	.0990	.0270	.0040	-.0110
90.000		1.1360	.5750	.1390	.0720	.0920			.0810		.1030	.0170	.0310	-.0210	-.0220
120.000			.5710	.1960	.1410	.1490			.2260		.0790	-.0340	-.0450	-.0260	-.0260
142.000										.0660					
150.000			.5540	.1990	.1850	.2270			.6810		-.0090	-.0390	-.0550	-.0440	-.0220
157.000								.8740							
162.000									.7890						
165.000											-.0380	-.0550	-.0470	-.0450	-.0170
169.000									.7850						
172.000							.6940								
180.000	1.5000	1.1250	.4680	.2110	.1940	.2420			1.0460		-.0640	-.0580	-.0550	-.0470	-.0460

X/LB	.5073	.6828	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0470							-.1040		-.0870
40.000	-.0300	.0030		.0840	.0440	-.0080	-.0460			-.1170
75.000		-.0340	-.0750	-.0740	-.0480	-.0420	-.0550	-.0480		
90.000		-.0420	-.0420	-.0490	-.0330	-.0160	-.0220	-.0220		
105.000				.0050	-.0060	-.0170	-.0150	-.0210		
110.000									.0230	
120.000		-.0340	-.0440	.1550	.1220	-.0160	-.0390	-.0090	-.0080	
135.000				.2810	.2470	-.0170	-.0520	-.0300		
150.000		-.1290	-.0320	.0640	.1480	-.0420	-.0210	.0220		

AMES 87-707 IA9 OA + S3 + T9 ORBITER FUSELAGE (RBNB06)

MACH (2) = 2.999 BETAT (4) = -2.11

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0280		.0340	.1450	.1090	.0980	.0300		
180.000		-.0290	-.0280	-.0250						

MACH (2) = 2.999 BETAT (5) = 2.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0592	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.5610	.8470	.4990	.0320	.0150	.0670			.0890		.0950	.1080	.0920	.0560	-.0060
20.000			.3970	.0290	.0140	-.0060			.0990		.0760				
40.000			.4180	.0300	.0130	.0000			.0390		.0540	.0710	.0530	.0150	-.0340
55.000			.4220	.0320	.0130	.0330			.0370		.0630				
75.000			.4290	.0310	.0090	.0360			.0220		.0550	-.0060	-.0010	-.0180	-.0290
90.000		.3890	.4420	.0540	.0130	.0330			.0240		.0180	-.0450	-.0480	-.0160	-.0310
120.000			.4670	.1140	.0840	.0850			.0970		.0170	-.0720	-.0750	-.0500	-.0270
142.000										.0230					
150.000			.4870	.1500	.1520	.1940			.0620		-.0500	-.0720	-.0730	-.0520	-.0380
157.000								.8330							
162.000									.0440						
165.000											-.0550	-.0780	-.0620	-.0500	-.0470
169.000									.0780						
172.000							.9070								
180.000	1.5610	1.1240	.4660	.1990	.1940	.2390			1.0230		-.0750	-.0920	-.0490	-.0450	-.0410

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0470							-.1090		-.0870
40.000	-.0680	-.0340		.0080	-.0210	-.0590	-.0360			-.0970
70.000		-.0620	-.0760	-.0730	-.0560	-.0650	-.0730	-.0550		
90.000		-.0470	-.0640	-.0450	-.0430	-.0360	-.0520	-.0450		
105.000				.0030	-.0170	-.0350	-.0550	-.0480		
110.000									.0330	
120.000		-.0230	-.0290	.2160	.0490	-.0730	-.0760	-.0420	-.0230	
135.000				.2290	.2750	-.0420	-.0500	-.0170		
150.000		-.0170	-.0160	.1240	.2860	.0110	.0160	.0230		
165.000		-.0150		.0100	.1680	.1570	.0730	.0410		
180.000		-.0330	-.0330	-.0270						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU6)

MACH (2) = 2.999 BETAT (6) = 4.37

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5380	.8310	.3620	.0350	.0030	.0420			.1210		.0760	.0720	.0750	.0210	-.0260
2.000			.3630	.0320	-.0040	.0260			.0740		.0470				
4.000			.3540	.0310	.0020	.0080			.0140		.0280	.0720	.0360	-.0140	-.0560
55.000			.3660	.0230	-.0010	.0210			.0170		.0240				
7.000			.3590	.0110	-.0180	.0150			.0080		.0310	-.0350	-.0290	-.0260	-.0360
9.000		.9690	.3740	.0290	-.0170	.0090			.0060		-.0060	-.0580	-.0680	-.0290	-.0390
12.000			.4110	.0910	.0550	.0590			.0560		-.0110	-.0850	-.0910	-.0790	-.0320
142.000										-.0420					
15.000			.4470	.1420	.1330	.1740			.5010		-.0420	-.0890	-.0830	-.0710	-.0580
157.000								.7800							
162.000									.7250						
165.000											-.0830	-.0840	-.0570	-.0590	-.0650
169.000									.7680						
172.000							.8450								
180.000	1.5380	1.1180	.4540	.1980	.1910	.2360			1.0150		-.0680	-.0640	-.0550	-.0520	-.0560

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0430							-.1080		-.0850
4.000	-.0750	-.0420		-.0270	-.0420	-.0830	-.1150			-.0820
7.000		-.0540	-.0770	-.0720	-.0610	-.0610	-.0720	-.0610		
9.000		-.0480	-.0610	-.0480	-.0320	-.0460	-.0590	-.0540		
11.500				.0050	-.0310	-.0440	-.0590	-.0570		
11.000									.0080	
12.000		-.0260	-.0330	.0330	.0230	-.0840	-.0860	-.0610	-.0480	
135.000				.0540	.0290	-.0590	-.0490	-.0310		
15.000		-.0240	-.0260	.1000	.0570	.0250	-.0020	.0090		
165.000		-.0510		-.0190	.0030	.0110	.0390	.0260		
180.000		-.0790	-.0730	-.0130						

MACH (2) = 2.999 BETAT (7) = 6.53

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5160	.8360	.3330	.0150	.0110	.0640			.1490		.0810	.0600	.0510	-.0030	-.0240
2.000			.3190	.0090	-.0030	.0440			.0940		.0650				
4.000			.3220	.0010	-.0120	.0190			.0180		-.0050	-.0040	-.0050	-.0400	-.0730
55.000			.3250	-.0050	-.0260	.0090			.0180		.0240				
7.000			.3110	-.0050	-.0410	-.0080			.0020		.0180	-.0490	-.0560	-.0280	-.0440
9.000		.8450	.3230	.0030	-.0360	-.0110			-.0320		-.0360	-.0790	-.0790	-.0420	-.0380
12.000			.3680	.0690	.0350	.0370			.0250		-.0390	-.1030	-.1020	-.0890	-.0340

AMES 87-7.7 IA9 OEA + S3 + T9 ORBITER FUSELAGE (SENSOR)

MACH (2) = 2.999 BETAT (7) = 6.53)

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

#/LB	.0000	.0475	.1195	.1559	.1902	.1355	.1506	.1591	.1732	.1958	.2259	.2711	.3241	.3953	.5126
PHI															
142.00										-.019)					
152.00			.4159	.1299	.1199	.1539			.4519		-.0579	-.1159	-.1089	-.0789	-.0429
157.00								.7319							
162.00									.7159						
165.00											-.1049	-.1099	-.0979	-.0699	-.0439
169.00									.7619						
172.00							.7029								
179.00	1.5189	1.0569	.4519	.1959	.1249	.2229			.3949		-.0659	-.0739	-.0619	-.0549	-.0479
#/LB	.5873	.6829	.7589	.7959	.8293	.8849	.9252	.9539	1.0015	1.0392					
PHI															
.00	-.0549							-.1119		-.0929					
4.00	-.0599	-.1449		-.0479	-.0699	-.0489	-.0149			-.0729					
7.00		-.0529	-.1749	-.0569	-.0379	-.0599	-.0739	-.0509							
9.00		-.0449	-.1159	-.0429	-.0359	-.0429	-.0589	-.0559							
13.00				-.0329	-.0469	-.0479	-.0759	-.0649							
15.00									-.0329						
17.00		-.0269	-.0419	.0459	.0219	-.0699	-.0959	-.0729	-.0659						
135.00				.4279	.3179	-.0479	-.0569	-.0559							
15).00		-.0429	-.0589	-.0219	.2449	-.0429	-.0229	-.0179							
165.00		-.0259		-.0269	.1329	.0329	-.0269	-.0599							
19).00		-.0179	-.0799	-.0429											

MACH (2) = 2.999 BETAT (5) = 6.69)

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

#/LB	.0000	.0475	.0159	.0339	.0492	.1355	.1506	.1591	.1732	.1958	.2259	.2711	.3241	.3953	.5126
PHI															
.00	1.4929	.9319	.3339	.0179	.0249	.0679			.1769		.0969	.0399	.0329	-.0189	-.0199
2.00			.3199	.0129	.0079	.0229			.0979		.1399				
4.00			.3059	.0029	-.0159	-.0169			.0259		-.0339	-.0599	-.0729	-.0619	-.0599
55.00			.2879	-.0179	-.0349	-.0469			-.0139		.0469				
7.00			.2599	-.0329	-.0489	-.0259			-.0499		.0019	-.0559	-.0659	-.0449	-.0369
9.00		.7819	.2729	-.0279	-.0539	-.0249			-.0399		-.0499	-.0599	-.0769	-.0659	-.0599
12.00			.3249	.0439	.0249	.0159			.0129		-.0619	-.0999	-.0749	-.0599	-.0429
142.00										-.0389					
15).00			.3859	.1219	.1049	.1169			.0		-.0699	-.1119	-.0979	-.0819	-.0749
157.00								.6459							
162.00									.5969						
165.00											-.1139	-.0999	-.0799	-.0939	-.0939
169.00									.7449						
172.00							.7179								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU6)

MACH (2) = 2.999 BETAT (8) = ° 69U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.492U	1.077U	.443U	.190U	.181U	.217U			.970U		-.061U	-.071U	-.070U	-.093U	-.120U

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.048U							-.098U		-.101U
40.000	-.104U	-.075U		-.041U	-.088U	-.085U	-.093U			-.084U
70.000		-.062U	-.070U	-.069U	-.062U	-.041U	-.060U	-.069U		
90.000		-.047U	-.057U	-.048U	-.048U	-.038U	-.049U	-.061U		
105.000				-.011U	-.047U	-.039U	-.068U	-.069U		
110.000									-.046U	
120.000		-.045U	-.054U	.105U	.016U	-.086U	-.087U	-.082U	-.073U	
135.000				.356U	.325U	-.042U	-.059U	-.054U		
150.000		-.105U	-.118U	-.092U	-.023U	-.071U	-.062U	-.079U		
165.000		-.121U		-.071U	.007U	-.027U	-.052U	-.084U		
180.000		-.125U	-.111U	-.077U						

MACH (3) = 3.502 BETAT (1) = -9.75U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.000U	.000U	.000U	.012U	-.018U	.055U			.163U		.102U	.044U	.048U	.029U	-.015U
25.000			.442U	.044U	-.013U	.079U			.139U		.130U				
40.000			.616U	.146U	.074U	.097U			.282U		.177U	.128U	.055U	.000U	.030U
55.000			.652U	.225U	.169U	.160U			.213U		.328U				
70.000			.772U	.253U	.183U	.173U			.216U		.305U	.209U	.103U	.073U	.052U
90.000		.000U	.797U	.278U	.195U	.195U			.198U		.234U	.156U	.104U	.062U	.036U
120.000			.736U	.293U	.241U	.271U			.364U		.174U	.048U	.034U	.034U	.011U
142.000										.182U					
150.000			.631U	.244U	.227U	.285U			.848U		.053U	.021U	.008U	.019U	.003U
157.000								.966U							
162.000									.929U						
165.000											.028U	.015U	.014U	.008U	.016U
169.000									.841U						
172.000							.854U								
180.000	.000U	.000U	.454U	.252U	.168U	.257U			1.031U		-.027U	-.041U	-.048U	-.064U	-.089U

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.025U							-.060U		-.081U
40.000	.016U	.040U		.184U	.168U	.112U	.071U			-.054U

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU6)

MACH (3) = 3.502 BETAT (1) = -8.750

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0080	-.0390	-.0280	-.0120	.0390	.0350	.0180		
90.000		.0080	-.0190	-.0160	.0350	.0640	.0780	.0660		
105.000				.0590	.0770	.1200	.0980	.0620		
110.000									.0710	
120.000		-.0110	-.0260	.3310	.2550	.0740	.0860	.0710	.0670	
135.000				.2190	.2750	.0210	-.0170	-.0030		
150.000		-.0070	-.0160	.0380	.0630	-.0470	-.0300	-.0080		
165.000		-.0420		.0400	.0870	.0320	.1050	.0340		
180.000		-.0960	-.0910	-.0790						

MACH (3) = 3.502 BETAT (2) = -6.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0050	-.0070	.0540			.1360		.0940	.0630	.0480	.0180	-.0110
20.000			.4210	.0280	-.0190	.0760			.0890		.1360				
40.000			.5690	.1110	.0470	.1160			.0920		.1990	.0940	.0460	.0130	.0020
55.000			.6125	.1810	.1290	.1200			.1600		.2890				
70.000			.7040	.2070	.1410	.1290			.1540		.2170	.1750	.0820	.0520	.0290
90.000		.0000	.7310	.2310	.1540	.1560			.1290		.1650	.0780	.0810	.0460	.0180
120.000			.6870	.2580	.2110	.2280			.2990		.1380	.0210	-.0030	.0200	.0020
142.000										.1460					
150.000			.6100	.2270	.2140	.2630			.7900		.0320	.0040	-.0110	-.0080	-.0120
157.000								.9370							
162.000									.8880						
165.000											.0090	-.0100	-.0070	-.0170	-.0030
169.000									.8320						
172.000							.8600								
180.000	.0000	.0000	.4580	.2010	.1870	.2150			1.0560		-.0350	-.0450	-.0450	-.0620	-.0700

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0390							-.0740		-.0850
40.000	-.0080	.0050		.1440	.1250	.0720	.0430			-.0650
70.000		-.0240	-.0320	-.0440	-.0340	.0150	.0100	-.0010		
90.000		-.0120	-.0340	-.0280	.0170	.0370	.0440	.0320		
105.000				.0370	.0440	.0560	.0570	.0340		
110.000									.0460	
120.000		-.0210	-.0330	.2010	.2070	.0370	.0360	.0460	.0420	
135.000				.1970	.2470	-.0130	-.0290	-.0190		
150.000		-.0210	-.0250	.0290	.0620	-.0510	-.0360	-.0220		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU6)

MACH (3) = 3.502 BETAT (2) = -6.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0390	.0130	.0110			.0560		.0530	.0810	.0740	.0370	.0040
20.000			.4090	.0500	.0150	.0390			.0470		.1260				
40.000			.5250	.0890	.0500	.1080			.0510		.1980	.0830	.0460	.0070	-.0040
55.000			.5560	.1450	.0930	.0960			.1150		.1580				
70.000			.6340	.1650	.1030	.0980			.1110		.1350	.1110	.0650	.0310	.0110
90.000		.0000	.6610	.1900	.1150	.1200			.0980		.1210	.0320	.0410	.0320	.0030
125.000			.6350	.2250	.1750	.1880			.2420		.1090	.0010	-.0240	.0030	-.0070
142.000										.1120					
150.000			.5820	.2170	.1980	.2400			.7310		.0190	-.0070	-.0270	-.0270	-.0190
157.000								.9090							
162.000									.8520						
165.000											-.0040	-.0240	-.0230	-.0270	-.0170
169.000									.8270						
172.000							.8760								
180.000	.0000	.0000	.4670	.2040	.1860	.2170			1.0730		-.0360	-.0460	-.0450	-.0410	-.0550

X/LB	.5873	.6626	.7385	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0290							-.0730		-.0730
40.000	-.0090	-.0180		.0990	.0830	.0300	.0110			-.0860
70.000		-.0350	-.0580	-.0540	-.0400	-.0110	-.0180	-.0240		
90.000		-.0260	-.0440	-.0370	-.0130	.0030	.0080	.0050		
105.000				.0120	.0140	.0170	.0190	.0090		
110.000									.0210	
120.000		-.0300	-.0390	.1780	.1630	.0110	-.0060	.0150	.0160	
135.000				.1960	.2270	-.0180	-.0380	-.0280		
150.000		-.0280	-.0340	.0280	.0790	-.0500	-.0360	-.0250		
165.000		-.0220		.0240	.0880	.0620	.0860	.0320		
180.000		-.0680	-.0650	-.0300						

MACH (3) = 3.502 BETAT (3) = -4.340

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0390	.0130	.0110			.0560		.0530	.0810	.0740	.0370	.0040
20.000			.4090	.0500	.0150	.0390			.0470		.1260				
40.000			.5250	.0890	.0500	.1080			.0510		.1980	.0830	.0460	.0070	-.0040
55.000			.5560	.1450	.0930	.0960			.1150		.1580				
70.000			.6340	.1650	.1030	.0980			.1110		.1350	.1110	.0650	.0310	.0110
90.000		.0000	.6610	.1900	.1150	.1200			.0980		.1210	.0320	.0410	.0320	.0030
125.000			.6350	.2250	.1750	.1880			.2420		.1090	.0010	-.0240	.0030	-.0070
142.000										.1120					
150.000			.5820	.2170	.1980	.2400			.7310		.0190	-.0070	-.0270	-.0270	-.0190
157.000								.9090							
162.000									.8520						
165.000											-.0040	-.0240	-.0230	-.0270	-.0170
169.000									.8270						
172.000							.8760								
180.000	.0000	.0000	.4670	.2040	.1860	.2170			1.0730		-.0360	-.0460	-.0450	-.0410	-.0550

X/LB	.5873	.6626	.7385	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0290							-.0730		-.0730
40.000	-.0090	-.0180		.0990	.0830	.0300	.0110			-.0860
70.000		-.0350	-.0580	-.0540	-.0400	-.0110	-.0180	-.0240		
90.000		-.0260	-.0440	-.0370	-.0130	.0030	.0080	.0050		
105.000				.0120	.0140	.0170	.0190	.0090		
110.000									.0210	
120.000		-.0300	-.0390	.1780	.1630	.0110	-.0060	.0150	.0160	
135.000				.1960	.2270	-.0180	-.0380	-.0280		
150.000		-.0280	-.0340	.0280	.0790	-.0500	-.0360	-.0250		
165.000		-.0220		.0240	.0880	.0620	.0860	.0320		
180.000		-.0680	-.0650	-.0300						

AMES 07-7U7 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU6)

MACH (3) = 3.502 BETAT (4) = -2.15U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0440	.0070	.0090			.0490		.0590	.0840	.0720	.0710	.0110
20.000			.4600	.0600	.0070	.0090			.0260		.0800				
40.000			.5110	.0990	.0440	.0840			.0250		.2190	.0840	.0420	.0130	.0000
55.000			.5330	.1190	.0830	.0760			.0920		.0960				
70.000			.5690	.1270	.0760	.0790			.0860		.0960	.0350	.0450	.0160	.0010
90.000		.0000	.5920	.1500	.0860	.0940			.0680		.0890	.0440	.0000	.0180	-.0060
120.000			.5830	.1930	.1480	.1530			.1930		.0790	-.0180	-.0370	-.0230	-.0130
142.000										.0890					
150.000			.5560	.2010	.1830	.2150			.6720		.0050	-.0230	-.0370	-.0380	-.0290
157.000								.8880							
162.000									.8190						
165.000											-.0170	-.0390	-.0350	-.0390	-.0330
169.000									.8200						
172.000							.9250								
180.000	.0000	.0000	.4690	.2090	.1870	.2210			1.0770		-.0420	-.0440	-.0400	-.0370	-.0460

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.0650		-.0730
40.000	-.0130	-.0310		.0660	.0240	.0010	-.0210			-.0890
70.000		-.0460	-.0860	-.0610	-.0520	-.0300	-.0380	-.0410		
90.000		-.0360	-.0570	-.0450	-.0290	-.0170	-.0130	-.0170		
105.000				.0000	-.0040	-.0030	-.0090	-.0170		
110.000									.0070	
120.000		-.0360	-.0420	.1390	.1220	-.0070	-.0250	-.0170	-.0020	
135.000				.2340	.2210	-.0160	-.0360	-.0250		
150.000		-.0290	-.0360	.0340	.1010	-.0380	-.0270	-.0180		
165.000		-.0270		.0100	.0940	.0880	.0910	.0370		
180.000		-.0400	-.0390	-.0230						

MACH (3) = 3.502 BETAT (5) = 2.26U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0480	.0070	.0070			.0450		.0600	.0830	.0710	.0700	.0120
20.000			.4470	.0540	.0010	.0050			.0190		.0450				
40.000			.4720	.0720	.0180	.0220			.0120		.0490	.0480	.0530	.0180	-.0170
55.000			.4700	.0750	.0430	.0390			.0390		.0160				
70.000			.4480	.0660	.0290	.0400			.0320		.0350	-.0120	-.0310	-.0090	-.0220
90.000		.0000	.4600	.0790	.0330	.0440			.0190		.0340	-.0320	-.0430	-.0370	-.0250
120.000			.4770	.1340	.0960	.0980			.0690		.0320	-.0470	-.0590	-.0560	-.0360

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU6)

MACH (3) = 3.502 BETAT (5) = 2.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0430					
150.000			.4900	.1640	.1520	.1800			.5510		-.0070	-.0470	-.0570	-.0520	-.0520
157.000								.8320							
162.000									.7690						
165.000											-.0380	-.0530	-.0520	-.0430	-.0480
169.000									.8040						
172.000							.8760								
180.000	.0000	.0000	.4675	.2010	.1860	.2190			1.0620		-.0460	-.0420	-.0390	-.0380	-.0450

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.0500		-.0710
40.000	-.0405	-.0630		.0080	-.0340	-.0490	-.0620			-.0870
70.000		-.0590	-.0720	-.0690	-.0600	-.0515	-.0590	-.0530		
90.000		-.0480	-.0620	-.0560	-.0450	-.0260	-.0370	-.0430		
105.000				-.0070	-.0170	-.0320	-.0370	-.0460		
115.000									.0000	
125.000		-.0330	-.0380	.1170	.0560	-.0430	-.0510	-.0430	-.0350	
135.000				.1520	.2130	-.0420	-.0310	-.0200		
150.000		-.0320	-.0300	.0820	.2130	.0200	.0020	.0130		
165.000		-.0350		.0140	.1250	.1150	.0710	.0340		
180.000		-.0400	-.0370	-.0220						

MACH (3) = 3.502 BETAT (6) = 4.450

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0390	.0100	.0060			.0530		.0530	.0990	.0840	.0350	.0020
20.000			.4010	.0410	.0000	.0040			.0210		.0490				
40.000			.3960	.0480	.0040	.0060			.0080		.0260	.0200	.0550	.0070	-.0390
55.000			.3960	.0390	.0140	.0210			.0220		.0030				
70.000			.3780	.0280	-.0010	.0200			.0130		.0160	-.0300	-.0520	-.0210	-.0280
90.000		.9000	.3940	.0450	.0050	.0200			-.0050		.0000	-.0490	-.0510	-.0510	-.0260
120.000			.4250	.1020	.0680	.0670			.0340		.0050	-.0610	-.0720	-.0650	-.0460
142.000										.0240					
150.000			.4560	.1470	.1330	.1590			.4940		-.0200	-.0600	-.0640	-.0600	-.0600
157.000								.8010							
162.000									.7650						
165.000											-.0560	-.0620	-.0530	-.0480	-.0590
169.000									.8060						
172.000							.8270								

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB06)

MACH (3) = 3.502 BETAT (6) = 4.450

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	.0000	.0000	.4610	.1990	.1840	.2120			1.0560		-.0440	-.0440	-.0440	-.0430	-.0610

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0320							-.0710		-.0750
40.000	-.0570	-.0740		-.0200	-.0520	-.0500	-.0730			-.0760
70.000		-.0640	-.0780	-.0690	-.0660	-.0480	-.0600	-.0580		
90.000		-.0510	-.0630	-.0530	-.0410	-.0320	-.0520	-.0570		
105.000				-.0010	-.0220	-.0380	-.0500	-.0580		
110.000									-.0560	
120.000		-.0350	-.0380	.0310	.0010	-.0610	-.0660	-.0570	-.0520	
135.000				.3750	.2490	-.0290	-.0390	-.0360		
150.000		-.0410	-.0380	.0610	.2440	-.0020	-.0140	.0060		
165.000		-.0600		-.0140	.1400	.0590	.0450	.0170		
180.000		-.0720	-.0670	-.0340						

MACH (3) = 3.502 BETAT (7) = 6.650

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0050	-.0050	.0510			.1340		.0860	.0640	.0440	.0090	-.0170
20.000			.3190	-.0070	-.0140	.0420			.0690		.0240				
40.000			.3400	-.0060	-.0230	.0240			.0090		-.0020	-.0060	-.0090	-.0410	-.0550
55.000			.3380	.0010	-.0270	-.0440			.0070		.0420				
70.000			.3220	.0030	-.0230	-.0440			-.0140		.0020	-.0400	-.0550	-.0360	-.0380
90.000		.0000	.3320	.0190	-.0170	-.0440			-.0280		-.0370	-.0700	-.0700	-.0680	-.0370
120.000			.3740	.0790	.0450	.0450			.0070		-.0160	-.0720	-.0840	-.0800	-.0620
142.000										.0050					
150.000			.4200	.1310	.1190	.1440			.4390		-.0300	-.0700	-.0740	-.0690	-.0620
157.000								.7450							
162.000									.7490						
165.000											-.0690	-.0670	-.0600	-.0610	-.0750
169.000									.7910						
172.000							.7640								
180.000	.0000	.0000	.4530	.1910	.1800	.2030			1.0330		-.0390	-.0470	-.0540	-.0610	-.0750

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0400							-.0870		-.0930
40.000	-.0780	-.0770		-.0390	-.0480	-.0650	-.0790			-.0770

AMES 87-7U7 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU6)

MACH (3) = 3.5U2 BETAT (7) = 6.65U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.3873	.8826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0880	-.0810	-.0710	-.0650	-.0460	-.0580	-.0560		
90.000		-.0500	-.0610	-.0530	-.0390	-.0410	-.0540	-.0550		
105.000				-.0090	-.0430	-.0580	-.0660	-.0630		
110.000									-.0640	
120.000		-.0380	-.0420	.0640	.0170	-.0690	-.0640	-.0670	-.0610	
135.000				.2860	.2520	-.0300	-.0420	-.0350		
150.000		-.0850	-.0700	-.0160	.0920	-.0160	.0050	-.0180		
165.000		-.0810		-.0500	.0410	.0240	-.0210	-.0480		
180.000		-.0960	-.0820	-.0690						

MACH (3) = 3.5U2 BETAT (8) = 8.85U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0000	.0060	-.0240	.0460			.1520		.0900	.0270	.0270	.0220	-.0220
20.000				.3100	-.0110	-.0340	.0490			.1000		.0430				
40.000				.3090	-.0170	-.0470	.0140			.0180		-.0330	-.0620	-.0670	-.0720	-.0780
55.000				.3080	-.0160	-.0400	-.0240			-.0080		-.0070				
70.000				.2710	-.0200	-.0410	-.0230			-.0330		-.0190	-.0590	-.0720	-.0540	-.0460
90.000			.0000	.2810	-.0240	-.0360	-.0230			-.0480		-.0690	-.0940	-.0920	-.0830	-.0450
120.000				.3260	.0540	.0240	.0220			.0040		-.0500	-.0960	-.0940	-.0890	-.0770
142.000											-.0100					
150.000				.3810	.1120	.1010	.1190			.3790		-.0550	-.0910	-.0840	-.0730	-.0760
157.000									.6520							
162.000										.7270						
165.000												-.0910	-.0860	-.0680	-.0790	-.0900
169.000										.7650						
172.000								.6990								
180.000	.0000	.0000	.4450	.1840	.1710	.1830				1.0070		-.0490	-.0680	-.0630	-.0790	-.1010

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0290							-.0690		-.0910
40.000	-.0880	-.0880		-.0440	-.0550	-.0710	-.0860			-.0720
70.000		-.0890	-.0810	-.0700	-.0660	-.0390	-.0530	-.0550		
90.000		-.0510	-.0630	-.0600	-.0410	-.0430	-.0530	-.0560		
105.000				-.0300	-.0390	-.0510	-.0640	-.0640		
110.000									-.0590	
120.000		-.0540	-.0640	.0590	.0160	-.0660	-.0610	-.0710	-.0640	
135.000				.1230	.2070	-.0390	-.0460	-.0470		
150.000		-.0930	-.1020	-.0820	-.0580	-.0520	-.0660	-.0700		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU6)

MACH (3) = 3.502 BETAT (8) = 8.850

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6026	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
180.000		-.1070		-.0780	-.0450	-.0430	-.0630	-.0820		
180.000		-.1110	-.1010	-.0680						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU7) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
[illegible] = [illegible] INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 2.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

MACH (1) = 2.498 BETAT (1) = -8.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3580	.8900	.4350	.0390	.0720	.2310			.0810		.0380	.0080	.0030	-.0390	-.0540
20.000			.5160	.0850	.0740	.1760			.1270		.0250				
40.000			.6440	.1750	.1460	.2220			.1740		.0760	.0180	-.0040	-.0490	.1050
55.000			.6980	.2320	.2040	.4120			.3170		.2240				
70.000			.7210	.2280	.1880	.4750			.3600		.2780	.1020	.0140	.0690	.0140
90.000		1.1930	.7040	.2280	.1810	.2600			.4330		.3400	.0870	.0080	-.0010	-.0110
125.000			.6380	.2350	.2060	.2760			.4370		.2500	.0520	-.0050	-.0400	-.0350
142.000										.1340					
150.000			.5460	.1830	.1910	.2750			.7700		.0100	.0110	-.0050	-.0150	-.0420
157.000								.8720							
162.000									.7600						
165.000											-.0480	.0150	.0310	-.0010	-.0410
169.000									.6470						
172.000							.7920								
180.000	1.3580	.9430	.3770	.1480	.1440	.1970			.8290		-.1070	-.1060	-.0840	-.1380	-.1590

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.1420		-.1150
40.000	.1040	.0670		.2380	.1700	.1190	-.0180			-.1230
75.000		-.0230	-.0360	-.0290	-.0160	.0190	-.0090	-.0120		
90.000		-.0130	-.0200	-.0030	.0090	.0460	.0320	.0170		
105.000				.1230	.1470	.1020	.0280	.0050		
110.000									-.0030	
120.000		-.0410	-.0430	.3810	.3190	.0490	.0240	.0160	.0040	
135.000				.1950	.2220	-.0620	-.0890	-.0680		
150.000		-.0570	-.0580	.0030	.0210	-.1180	-.0950	-.0650		
165.000		-.0510		.0350	.0830	.0240	.1205	.0210		
180.000		-.1270	-.1225	-.0660						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB07)

MACH (1) = 2.498 BETAT (2) = -6.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3780	.9160	.4350	.0450	.0900	.1140			.1230		.0460	.0620	.0230	-.0360	-.0630
20.000			.5070	.0750	.0990	.2260			.1490		.0440				
40.000			.6170	.1560	.1330	.1790			.1580		.0690	.0150	-.0180	-.0290	.0290
55.000			.6440	.1900	.1600	.3580			.2710		.1920				
70.000			.6550	.1920	.1390	.2500			.3160		.2460	.0750	-.0050	-.0160	-.0160
90.000		1.1420	.6420	.1850	.1330	.2130			.3010		.3010	.0680	-.0070	-.0260	-.0320
125.000			.5920	.2020	.1720	.2340			.3560		.2120	.0250	-.0210	-.0430	-.0490
142.000										.0840					
150.000			.5230	.1680	.1740	.2460			.7170		-.0180	-.0200	-.0310	-.0270	-.0560
157.000								.8390							
162.000									.7290						
185.000											-.0730	-.0380	.0010	-.0160	-.0550
189.000									.6490						
172.000							.7770								
180.000	1.3780	.9550	.3770	.1500	.1430	.2160			.8480		-.1150	-.1170	-.0880	-.1320	-.1380

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0400							-.1330		-.1080
40.000	.0830	.0470		.1870	.1290	.0820	-.0350			-.1340
70.000		-.0530	-.0600	-.0530	-.0320	-.0060	-.0320	-.0350		
90.000		-.0410	-.0470	-.0260	.0510	.0230	.0060	-.0110		
105.000				.0780	.1050	.0250	.0020	-.0220		
110.000									-.0240	
120.000		-.0580	-.0630	.3030	.2690	.0360	-.0040	-.0490	-.0110	
135.000				.1870	.2230	-.0420	-.0860	-.0670		
150.000		-.0650	-.0660	.0110	.0310	-.1130	-.0750	-.0410		
165.000		-.0590		.0280	.0870	.0480	.0960	.0120		
180.000		-.0980	-.1010	-.0580						

MACH (1) = 2.498 BETAT (3) = -4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3950	.8980	.4130	.0170	.0710	-.0090			.1450		.0950	.0810	.0620	-.0120	-.0790
20.000			.4730	.0390	.0900	-.0060			.1620		.0650				
40.000			.5660	.1080	.1020	.1380			.1770		.0670	.0210	-.0030	-.0230	-.0070
55.000			.5840	.1390	.1110	.2730			.2320		.1660				
70.000			.5820	.1380	.0950	.1620			.2800		.2190	.0540	-.0230	-.0340	-.0380
90.000		1.0870	.5750	.1350	.0920	.1530			.2390		.2590	.0520	-.0180	-.0440	-.0520
120.000			.5440	.1660	.1380	.1820			.2730		.1560	.0010	-.0370	-.0490	-.0650

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB07)

MACH (1) = 2.498 BETAT (3) = -4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0460					
150.000			.4980	.1490	.1630	.2210			.6740		-.0340	-.0590	-.0520	-.0420	-.0620
157.000								.8160							
162.000									.6920						
165.000											-.0860	-.0790	-.0420	-.0290	-.0580
169.000									.6500						
172.000							.7940								
180.000	1.3950	.9710	.3790	.1500	.1460	.2130			.8650		-.1200	-.1170	-.0920	-.0770	-.1080

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0700							-.1120		-.0960
40.000	.0520	.0210		.1360	.1770	.0420	-.0500			-.1480
70.000		-.0730	-.0770	-.0710	-.0430	-.0230	-.0490	-.0500		
90.000		-.0620	-.0640	-.0320	.0210	.0030	-.0120	-.0300		
105.000				.0450	.0700	.0040	-.0130	-.0380		
115.000									-.0430	
120.000		-.0680	-.0680	.2310	.1980	.0040	-.0100	-.0170	-.0290	
135.000				.1980	.2280	-.0560	-.0680	-.0500		
150.000		-.0650	-.0610	.0450	.0890	-.0670	-.0240	.0130		
165.000		-.0610		.0480	.1130	.0810	.0830	-.0690		
180.000		-.0750	-.0680	-.0530						

MACH (1) = 2.498 BETAT (4) = -2.060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4040	.8770	.4000	.0050	.0430	.0640			.1480		.1330	.1110	.0740	-.0170	-.0880
20.000			.4390	.0180	.0520	.0120			.1860		.1080				
40.000			.5160	.0710	.0550	.0050			.2180		.0680	.0300	.0260	-.0220	-.0450
55.000			.5290	.0980	.0520	.1160			.2050		.1530				
70.000			.5210	.0970	.0410	.0970			.2090		.2080	.0410	-.0360	-.0490	-.0540
90.000		1.0300	.5150	.0970	.0380	.0980			.1420		.2190	.0340	-.0280	-.0560	-.0650
120.000			.5030	.1350	.0930	.1300			.2230		.0760	-.0240	-.0410	-.0580	-.0720
142.000										.0130					
150.000			.4750	.1400	.1340	.1860			.6240		-.0500	-.0840	-.0740	-.0510	-.0620
157.000								.7890							
162.000									.6640						
165.000											-.1000	-.1030	-.0790	-.0370	-.0560
169.000									.6530						
172.000							.8150								

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB07)

MACH (1) = 2.498 BETAT (4) = -2.00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.4040	.9850	.3860	.1540	.1420	.1990			.8720		-.1230	-.1050	-.1000	-.0700	-.0520

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0920							-.1100		-.0830
40.000	.0140	-.0480		.0840	.0360	.0620	-.0870			-.1260
70.000		-.0890	-.0910	-.0860	-.0480	-.0390	-.0620	-.2050		
90.000		-.0750	-.0750	-.0270	-.0120	-.0090	-.0320	-.0470		
105.000				.0260	.0400	.0130	-.0320	-.0530		
115.000									-.0550	
120.000		-.0680	-.0670	.1370	.1380	.0110	-.0240	-.0270	-.0330	
135.000				.2230	.2430	-.0550	-.0480	-.0210		
150.000		-.0570	-.0570	.0740	.1390	-.0510	-.0020	.0310		
165.000		-.0540		.0790	.1440	.0930	.0730	-.0170		
180.000		-.0530	-.0540	-.0530						

MACH (1) = 2.498 BETAT (5) = 2.17

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0198	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3940	.9010	.4050	.0130	.0590	.0550			.1700		.1300	.0990	.0740	-.0170	-.0840
20.000			.4140	.0060	.0620	.0280			.1500		.1430				
40.000			.4470	.0270	.0390	.0090			.1380		.0820	.0470	.0340	-.0470	-.0860
55.000			.4330	.0310	.0200	.0330			.0470		.1350				
70.000			.4020	.0290	-.0070	.0450			.0570		.1570	.0210	-.0440	-.0600	-.0720
90.000		.8980	.3890	.0220	-.0110	.0290			.0890		.0570	.0040	-.0440	-.0650	-.0740
120.000			.3970	.0730	.0450	.0640			.0880		.0610	-.0940	-.0800	-.0650	-.0590
142.000										-.0360					
150.000			.4120	.1060	.1090	.1580			.5120		-.0790	-.1200	-.1100	-.0640	-.0310
157.000								.7470							
162.000									.6110						
165.000											-.1220	-.1280	-.1020	-.0700	-.0260
169.000									.6480						
172.000							.8310								
180.000	1.3940	.9040	.3820	.1530	.1510	.2080			.8640		-.1210	-.1060	-.0940	-.0660	-.0530

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0820							-.1000		-.0680
40.000	-.0150	-.0490		-.0110	-.0480	-.0440	-.1180			-.0780

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNS807)

MACH (1) = 2.498 BETAT (5) = 2.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0880	-.0880	-.0830	-.0610	-.0570	-.0740	-.0810		
90.000		-.0730	-.0760	-.0380	-.0510	-.0320	-.0540	-.0670		
105.000				-.0070	-.0260	-.0290	-.0530	-.0760		
110.000									-.0670	
120.000		-.0540	-.0580	.1110	.0640	-.0310	-.0620	-.0520	-.0410	
135.000				.2910	.2450	-.0560	-.0530	-.0130		
150.000		-.0450	-.0490	.1220	.2500	-.0040	.0170	-.0030		
165.000		-.0380		.0310	.1820	.1490	.0730	-.0090		
180.000		-.0530	-.0520	-.0510						

MACH (1) = 2.498 BETAT (6) = 4.290

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3248	.3953	.5120
PHI															
.000	1.3850	.8810	.4030	.0140	.0770	-.0420			.1460		.0890	.0920	.0630	-.0120	-.0740
20.000			.3940	.0030	.0630	.0110			.1550		.0990				
40.000			.3970	.0420	.0220	-.0060			.1070		.0890	.0260	.0030	-.0620	-.1010
55.000			.3760	.0000	-.0070	-.0040			.0260		.1230				
70.000			.3360	-.0180	-.0250	.0130			.0230		.1220	.0060	-.0450	-.0680	-.0820
90.000		.8330	.3240	-.0760	-.0290	.0000			.0490		.0230	-.0290	-.0470	-.0670	-.0810
120.000			.3440	.0420	.0150	.0310			.0410		-.0330	-.1170	-.1160	-.0660	-.0500
142.000										-.0570					
150.000			.3760	.0880	.0900	.1410			.0580		-.0940	-.1350	-.1190	-.0810	-.0300
157.000								.7000							
162.000									.6020						
165.000											-.1360	-.1350	-.1090	-.0840	-.0440
169.000									.6480						
172.000							.7960								
180.000	1.3850	.9000	.3760	.1450	.1460	.2020			.8550		-.1200	-.1120	-.0920	-.0720	-.1090

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0650							-.1140		-.0990
40.000	-.0290	-.0100		-.0410	-.0640	-.0790	-.1410			-.0890
70.000		-.0830	-.0900	-.0870	-.0650	-.0780	-.0860	-.0840		
90.000		-.0710	-.0780	-.0390	-.0450	-.0550	-.0760	-.0790		
105.000				.0010	-.0310	-.0560	-.0810	-.0810		
110.000									-.0740	
120.000		-.0590	-.0640	.0610	.0280	-.0930	-.0850	-.0610	-.0580	
135.000				.3960	.2570	-.0930	-.0640	-.0510		
150.000		-.0450	-.0510	.1190	.2830	.0140	-.0310	-.0150		

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBN8107)

MACH (1) = 2.498 BETAT (6) = 4.290

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.3873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0520		-.0270	.2130	.1120	.0440	-.0690		
180.000		-.0750	-.0680	-.0540						

MACH (1) = 2.498 BETAT (7) = 6.410

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1505	.1581	.1732	.1959	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3840	.9980	.4280	.0350	.0770	.1760			.1140		.0420	.0690	.0130	-.0350	-.0550
20.000			.4030	.0330	.0520	.0440			.1370		.0500				
40.000			.3660	.0060	.0260	-.0150			.1440		.0490	-.0600	-.0320	-.0880	-.0920
55.000			.3510	-.0020	-.0220	-.0130			.0820		.0730				
70.000			.3000	-.0350	-.0390	.0000			.0460		.0590	-.0670	-.0480	-.0750	-.0940
90.000		.7770	.2730	-.0370	-.0390	-.0120			.0250		.0000	-.0710	-.0550	-.0770	-.0970
120.000			.3150	.0120	-.0070	.0130			.0160		-.0570	-.1320	-.1280	-.1770	-.1870
142.000										-.0810					
150.000			.3480	.0720	.0780	.1220			.4110		-.1050	-.1450	-.1310	-.1990	-.2420
157.000								.6540							
162.000									.5990						
165.000											-.1490	-.1390	-.1170	-.1970	-.2090
169.000									.6430						
172.000							.7240								
180.000	1.3840	.9830	.3700	.1400	.1470	.1950			.8400		-.1150	-.1210	-.0940	-.1320	-.1430

X/LB	.3873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0370							-.1200		-.1110
40.000	-.0440	-.0170		-.0640	-.0930	-.0970	-.1290			-.1020
70.000		-.0730	-.0930	-.0950	-.0800	-.0800	-.0940	-.0910		
90.000		-.0680	-.0790	-.0480	-.0550	-.0670	-.0920	-.0880		
105.000				-.0220	-.0530	-.0660	-.0920	-.0930		
110.000									-.0880	
120.000		-.0670	-.0690	.0800	.0030	-.1120	-.0940	-.0870	-.0810	
135.000				.4350	.2740	-.0670	-.0920	-.0800		
150.000		-.0610	-.0650	.0710	.2250	-.0690	-.0120	-.0500		
165.000		-.0840		-.0430	.1430	.0200	.0210	-.0420		
180.000		-.1000	-.0970	-.0660						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB07)

MACH (1) = 2.498 BETAT (8) = 8.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3480	.6870	.4100	.0240	.0490	.2320			.0720		.0290	.0210	-.0130	-.0470	-.0530
20.000			.3820	.0120	.0330	.1820			.0620		.0190				
40.000			.3580	-.0080	-.0010	-.0600			.0350		-.0620	-.0620	-.0880	-.1140	-.1160
55.000			.3160	-.0090	-.0430	-.0310			-.0170		.0120				
70.000			.2580	-.0200	-.0550	-.0260			-.0420		.0360	-.0260	-.0590	-.0890	-.0970
90.000		.7180	.2310	-.0610	-.0580	-.0320			-.0300		-.0160	-.0850	-.0730	-.0840	-.0880
120.000			.2620	-.0070	-.0260	-.0180			.0030		-.0880	-.1500	-.1450	-.0880	-.0570
142.000										-.0980					
150.000			.3140	.0560	.0610	.0750			.0480		-.1210	-.1550	-.1410	-.1030	-.0910
157.000								.5460							
162.000									.0720						
165.000											-.1650	-.1480	-.1250	-.1400	-.1520
169.000									.0280						
172.000							.6380								
180.000	1.3480	.9530	.3650	.1340	.1420	.2050			.0150		-.1120	-.1180	-.0970	-.1500	-.1720

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.1320		-.1220
40.000	-.0800	-.0370		-.1250	-.0830	-.1230	-.1190			-.1080
70.000		-.0770	-.0990	-.1000	-.0820	-.0750	-.0930	-.0960		
90.000		-.0650	-.0830	-.0660	-.0600	-.0640	-.0870	-.0960		
105.000				-.0260	-.0720	-.0640	-.0950	-.1000		
110.000									-.1010	
120.000		-.0770	-.0720	.1200	.0020	-.1190	-.1170	-.1050	-.0970	
135.000				.4130	.3110	-.0700	-.0830	-.0750		
150.000		-.1140	-.1250	-.0600	-.0530	-.0930	-.0680	-.0890		
165.000		-.1440		-.0800	.0180	-.0320	-.0380	-.1220		
180.000		-.1320	-.1250	-.0660						

MACH (2) = 2.999 BETAT (1) = -8.590

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3980	.7910	.3580	.0360	.0150	.0460			.1620		.0440	.0210	.0490	-.0140	-.0220
20.000			.4270	.0560	.0190	.0620			.2130		.0680				
40.000			.5800	.1380	.0910	.4120			.2030		.1320	.0800	.0480	.0050	.0110
55.000			.6610	.2130	.1590	.2230			.3700		.2620				
70.000			.7060	.2280	.1610	.2090			.2080		.3220	.1440	.0520	.0360	.0220
90.000		1.2190	.7110	.2400	.1650	.2090			.2300		.3480	.1490	.0540	.0280	.0050
120.000			.6420	.2440	.2010	.2360			.3440		.1620	.0620	.0360	-.0080	-.0220

AMES 87-707 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RBNB07)

MACH (2) = 2.999 BETAT (1) = -8.590

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1360					
150.000			.5490	.1960	.1830	.2440			.7370		.0160	-.0060	-.0010	.0020	-.0150
157.000								.8410							
162.000									.7750						
165.000											-.0150	-.0080	-.0040	.0220	-.0070
169.000									.6900						
172.000							.7590								
180.000	1.3980	.9640	.3830	.1590	.1420	.1780			.8680		-.0670	-.0730	-.0710	-.0970	-.1210

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0500							-.1050		-.0980
40.000	.0680	.0730		.1970	.1670	.1110	.0400			-.0830
70.000		-.0230	-.0490	-.0410	-.0170	.0240	.0120	.0000		
90.000		-.0180	-.0330	-.0280	.0570	.0540	.0500	.0450		
105.000				.0610	.0820	.1250	.0580	.0350		
110.000									.0890	
120.000		-.0290	-.0360	.3080	.2450	.0860	.0430	.0450	.0320	
135.000				.1960	.2240	-.0360	-.0480	-.0370		
150.000		-.0330	-.0440	.0030	.0270	-.0960	-.0720	-.0230		
165.000		-.0320		.0200	.0670	.0060	.0900	.0190		
180.000		-.1150	-.1070	-.0760						

MACH (2) = 2.999 BETAT (2) = -6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4200	.7950	.3610	.0250	.0070	.0370			.1650		.0630	.0360	.0560	-.0100	-.0350
20.000			.4130	.0450	.0120	.0500			.2450		.0740				
40.000			.5490	.1130	.0680	.1420			.1880		.1300	.0680	.0000	-.0040	-.0120
55.000			.6060	.1710	.1190	.1620			.3360		.2330				
70.000			.6450	.1820	.1230	.1590			.1760		.3130	.1190	.0310	.0180	.0020
90.000		1.1720	.6540	.1980	.1270	.1570			.1690		.2670	.1100	.0340	.0110	-.0140
120.000			.6020	.2170	.1700	.1980			.2890		.1170	.0070	.0160	-.0120	-.0310
142.000										.1040					
150.000			.5280	.1880	.1700	.2260			.6930		-.0070	-.0290	-.0290	-.0170	-.0280
157.000								.8170							
162.000									.7520						
165.000											-.0340	-.0390	-.0250	-.0080	-.0150
169.000									.6890						
172.000							.7510								

AMES 67-767 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB07)

MACH (2) = 2.999 BETAT (2) = -6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
180.000	1.4250	.9020	.3880	.1610	.1440	.1840			.0880		-.0770	-.0820	-.0710	-.0920	-.1420

X/LB	.5873	.6626	.7380	.7869	.8203	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0590							-.1030		-.1680
40.000	.0280	.0620		.1680	.1320	.0650	.0150			-.0960
70.000		-.0430	-.0680	-.0590	-.0370	-.0070	-.0200	-.0250		
90.000		-.0320	-.0510	-.0450	.0160	.0200	.0150	.0140		
105.000				.0320	.0430	.0720	.0270	.0100		
110.000									.0620	
120.000		-.0430	-.0490	.2400	.1910	.0360	.0190	.0240	.0120	
135.000				.1790	.2050	-.0500	-.0640	-.0480		
150.000		-.0390	-.0490	-.0020	.0270	-.0970	-.0720	-.0460		
165.000		-.0390		.0020	.0600	.0230	.0750	.0110		
180.000		-.0990	-.0830	-.0500						

MACH (2) = 2.998 BETAT (3) = -4.270

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.4480	.8350	.3970	.0360	.0220	-.0130			.1240		.0910	.0500	.0080	.0310	-.0830
20.000			.4420	.0560	.0230	-.0100			.1750		.0690				
40.000			.5250	.1100	.0660	.0970			.2040		.1220	.0540	.0050	-.0120	-.0130
55.000			.5630	.1410	.0980	.1230			.1790		.2100				
70.000			.5860	.1440	.0680	.1160			.1320		.2390	.1100	.0150	.0420	-.0180
90.000		1.1220	.5950	.1600	.0910	.1180			.1050		.1560	.0780	.0230	-.0450	-.0280
120.000			.5610	.1860	.1390	.1640			.2330		.0850	-.0260	-.0120	-.0140	-.0390
142.000										.0730					
150.000			.5090	.1700	.1580	.2050			.6500		-.0180	-.0430	-.0490	-.0320	-.0350
157.000								.7980							
162.000									.7230						
165.000											-.0490	-.0810	-.0430	-.0370	-.0270
169.000									.6910						
172.000							.7870								
180.000	1.4480	1.0020	.3970	.1630	.1490	.1850			.9110		-.0800	-.0850	-.0710	-.0430	-.0770

X/LB	.5873	.6626	.7380	.7869	.8203	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0550							-.1010		-.1630
40.000	-.0690	.0370		.1290	.0660	.0370	-.0150			-.1160

AMES 87-7x7 IA9 OEA + 83 + T9 ORBITER FUSELAGE (RUN87)

MACH (2) = 2.999 BETAT (3) = -4.27

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0570	-.0810	-.0770	-.0520	-.0330	-.0370	-.0480		
90.000		-.0480	-.0670	-.0610	-.0190	-.0090	-.0060	-.0110		
105.000				.0670	.0120	-.0490	.0020	-.0120		
110.000									.0370	
120.000		-.0510	-.0580	.1610	.1350	-.0140	.0440	-.0010	-.0490	
135.000				.1540	.1990	-.0550	-.0580	-.0420		
150.000		-.0490	-.0530	.0170	.0540	-.0810	-.0680	-.0320		
165.000		-.0450		.0230	.0670	.0410	.0490	-.0030		
180.000		-.0780	-.0670	-.0580						

MACH (2) = 2.999 BETAT (4) = -2.11

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3209	.3953	.5125
PHI															
.000	1.4080	.8040	.3730	.1210	.0130	-.0250			.0910		.1180	.0940	.0930	.0480	-.0250
20.000			.4100	.1380	.0490	-.0110			.0380		.1270				
40.000			.4760	.1660	.0290	.0030			.0280		.1320	.0490	.0240	.0190	-.0130
55.000			.5050	.1820	.0680	.0030			.0180		.1740				
70.000			.5220	.1820	.0580	.0080			.0980		.1710	.0820	.0350	-.0110	-.0300
90.000		1.0660	.5320	.1200	.0580	.0080			.0640		.1140	.0490	.0090	-.0170	-.0380
120.000			.5150	.1570	.1130	.1270			.1880		.0580	-.0450	-.0430	-.0420	-.0480
142.000										.1480					
150.000			.4860	.1590	.1460	.1880			.0440		-.0310	-.0980	-.0620	-.0480	-.0360
157.000								.7780							
162.000									.7440						
165.000											-.0580	-.0740	-.0820	-.0580	-.0320
180.000									.0950						
172.000							.7930								
180.000	1.4080	1.0190	.4040	.1650	.1515	.1920			.9270		-.0830	-.0780	-.0680	-.0580	-.0510

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0810							-.1140		-.0830
40.000	-.0590	.0100		.0840	.0430	-.0130	-.0590			-.1180
70.000		-.0710	-.0880	-.0870	-.0600	-.0810	-.0640	-.0580		
90.000		-.0800	-.0770	-.0610	-.0400	-.0440	-.0440	-.0330		
105.000				-.0140	-.0180	-.0440	-.0350	-.0320		
110.000									.0070	
120.000		-.0550	-.0610	.0950	.0950	-.0520	-.0450	-.0140	-.0170	
135.000				.1780	.1960	-.0520	-.0750	-.0420		
150.000		-.0480	-.0480	.0390	.0990	-.0710	-.0440	-.0010		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNDU7)

MACH (2) = 2.999 BETAT (4) = -2.115

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0430		.0220	.0160	.0550	.0440	-.0070		
180.000		-.0460	-.0450	-.0420						

MACH (2) = 2.999 BETAT (5) = 2.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.4650	.8140	.3800	.0150	.0140	-.0260			.0620		.1130	.0980	.0690	.0450	-.0210
20.000			.3830	.0140	.0140	-.0300			.1030		.0890				
40.000			.4060	.0140	.0030	-.0050			.0370		.1130	.0510	.0350	.0070	-.0490
55.000			.4070	.0190	.0070	.0500			.0410		.0560				
70.000			.4010	.0300	-.0020	.0310			.0280		.0550	.0060	-.0140	-.0300	-.0490
90.000		.9330	.4070	.0500	.0030	.0310			.0070		.0240	-.0400	-.0370	-.0330	-.0510
125.000			.4220	.0990	.0600	.0690			.0710		.0440	-.0600	-.0610	-.0580	-.0440
142.000										.0690					
150.000			.4300	.1270	.1170	.1540			.0960		-.0490	-.0660	-.0660	-.0790	-.0370
157.000								.7480							
162.000									.0560						
165.000											-.0620	-.0940	-.0770	-.0840	-.0470
169.000									.0850						
172.000							.8110								
180.000	1.4650	1.0230	.4050	.1630	.154	.1910			.0140		-.0870	-.0620	-.0680	-.0840	-.0520

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0820							-.1090		-.0840
40.000	-.0720	-.0310		.0060	-.0120	-.0530	-.0910			-.0980
70.000		-.0770	-.0890	-.0860	-.0700	-.0800	-.0910	-.0660		
90.000		-.0630	-.0770	-.0640	-.0660	-.0530	-.0600	-.0500		
105.000				-.0280	-.0500	-.0630	-.0620	-.0530		
110.000									.0240	
120.000		-.0410	-.0470	.1040	.0370	-.0830	-.0880	-.0470	-.0360	
135.000				.1830	.2130	-.0830	-.0670	-.0320		
150.000		-.0290	-.0320	.0960	.1820	-.0210	-.0090	.0030		
165.000		-.0240		.0370	.1280	.0940	.0490	.0150		
180.000		-.0450	-.0450	-.0400						

AMES 87-707 IA9 OPA + 33 + T9 ORBITER FUSELAGE (RBNDU7)

MACH (2) = 2.999 BETAT (6) = 4.370

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4420	.8350	.3930	.0390	.0200	-.0070			.1260		.0960	.0640	.0830	.0240	-.0270
20.000			.3910	.0320	.0130	-.0110			.0460		.0240				
40.000			.4030	.0380	.0040	-.0170			-.0090		.0460	.0590	.0170	-.0210	-.0630
55.000			.3840	.0320	-.0010	.0220			-.0020		.0180				
70.000			.3540	.0150	-.0160	.0140			.0120		.0180	-.0410	-.0220	-.0370	-.0510
90.000		.8800	.3470	.0210	-.0180	.0140			-.0210		.0050	-.0620	-.0730	-.0340	-.0540
120.000			.3450	.0710	.0370	.0420			.0310		-.0200	-.0950	-.0890	-.0760	-.0450
142.000										-.0150					
150.000			.3910	.1120	.1000	.1390			.0390		-.0570	-.0990	-.0910	-.0800	-.0530
157.000								.7010							
162.000									.0420						
165.000											-.0960	-.0980	-.0790	-.0700	-.0680
169.000									.0680						
172.000							.7450								
180.000	1.4420	1.0080	.3940	.1610	.1490	.1850			.0900		-.0820	-.0820	-.0690	-.0660	-.0790

X/LB	.5875	.6626	.7580	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0580							-.1100		-.0790
40.000	-.0860	-.0370		-.0140	-.0390	-.0640	-.1110			-.0760
70.000		-.0790	-.0880	-.0840	-.0710	-.0850	-.0870	-.0700		
90.000		-.0660	-.0780	-.0580	-.0540	-.0650	-.0780	-.0640		
105.000				-.0190	-.0400	-.0700	-.0790	-.0660		
110.000									-.0380	
120.000		-.0380	-.0490	.0360	-.0030	-.0990	-.0960	-.0620	-.0480	
135.000				.3290	.2410	-.0680	-.0690	-.0410		
150.000		-.0300	-.0340	.0910	.2350	-.0030	-.0270	.0070		
165.000		-.0470		-.0290	.1460	.1120	.0410	.0210		
180.000		-.0810	-.0680	-.0590						

MACH (2) = 2.999 BETAT (7) = 6.530

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4170	.8020	.3690	.0270	.0130	.0270			.1570		.0640	.0340	.0440	-.0100	-.0320
20.000			.3610	.0210	.0080	-.0020			.0680		.0690				
40.000			.3550	.0210	-.0070	-.0160			-.0070		.0170	-.0170	-.0060	-.0520	-.0810
55.000			.3330	.0100	-.0200	-.0020			-.0070		.0110				
70.000			.2970	-.0070	-.0360	-.0060			-.0030		.0030	-.0470	-.0380	-.0450	-.0810
90.000		.7880	.2940	-.0060	-.0400	-.0070			-.0330		-.0240	-.0790	-.0840	-.0590	-.0820
120.000			.3240	.0480	.0170	.0230			.0030		-.0450	-.1040	-.1040	-.0880	-.0440

AMES 87-707 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNB07)

MACH (2) = 2.999 BETAT (7) = 6.530

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
142.000										-.0330					
150.000			.3600	.0950	.0870	.1180			.3870		-.0700	-.1100	-.1000	-.0660	-.0630
157.000								.6460							
162.000									.6310						
165.000											-.1130	-.1060	-.0840	-.0820	-.0900
169.000									.6700						
172.000							.6760								
180.000	1.4170	.9980	.3870	.1540	.1460	.1710			.8800		-.0800	-.0850	-.0800	-.0920	-.1120

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0580							-.0850		-.0870
40.000	-.0880	-.0450		-.0370	-.0600	-.0690	-.0900			-.0810
70.000		-.0780	-.0830	-.0790	-.0730	-.0690	-.0780	-.0770		
90.000		-.0650	-.0750	-.0590	-.0490	-.0520	-.0680	-.0720		
105.000				-.0240	-.0510	-.0520	-.0710	-.0710		
110.000									-.0740	
120.000		-.0410	-.0570	.0310	-.0060	-.0950	-.0900	-.0780	-.0670	
135.000				.3860	.2650	-.0430	-.0610	-.0600		
150.000		-.0600	-.0620	.0200	.1600	-.0280	-.0360	-.0640		
165.000		-.0830		-.0490	.0580	.0030	.0190	-.0380		
180.000		-.1020	-.0880	-.0510						

MACH (2) = 2.999 BETAT (8) = 8.690

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.3880	.7850	.3240	.0130	.0100	.0580			.1620		.0460	.0170	.0390	-.0140	-.0280
20.000			.3130	.0060	-.0060	.0170			.1050		.0240				
40.000			.3060	-.0010	-.0270	-.0060			.0280		-.0350	-.0620	-.0700	-.0850	-.0960
55.000			.2750	-.0130	-.0380	-.0110			-.0190		-.0010				
70.000			.2460	-.0340	-.0520	-.0260			-.0150		.0030	-.0480	-.0620	-.0530	-.0680
90.000		.7250	.2470	-.0280	-.0560	-.0280			-.0470		-.0420	-.0820	-.0830	-.0560	-.0630
120.000			.2830	.0240	-.0020	-.0120			.0060		-.0660	-.1160	-.1140	-.0950	-.0480
142.000										-.0480					
150.000			.3300	.0790	.0730	.0780			.3370		-.0800	-.1160	-.1040	-.0870	-.0770
157.000								.5420							
162.000									.6120						
165.000											-.1190	-.1100	-.0890	-.1000	-.1130
169.000									.6520						
172.000							.6180								

AMES 67-7U7 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNBU7)

MACH (2) = 2.999 BETAT (8) = 8.69U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.U44U	.U075	.U188	.U339	.U6U2	.1355	.15U6	.1581	.1732	.1958	.2259	.2711	.32U0	.3953	.512U
PHI															
18U.UU0	1.3U8U	.98U0	.381U	.149U	.139U	.165U			.859U		-.U75U	-.U85U	-.U85U	-.1U7U	-.131U
X/LB	.5873	.6628	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392					
PHI															
.UU0	-.U48U							-.119U		-.U96U					
4U.UU0	-.U9BU	-.U59U		-.U49U	-.U69U	-.114U	-.1U8U			-.U83U					
7U.UU0		-.U73U	-.U79U	-.U78U	-.U75U	-.U81U	-.U93U	-.U8U							
9U.UU0		-.U63U	-.U67U	-.U59U	-.U49U	-.U69U	-.U85U	-.U72U							
1U5.UU0				-.U26U	-.U55U	-.U69U	-.U98U	-.U78U							
11U.UU0									-.U51U						
12U.UU0		-.U55U	-.U64U	.U79U	.UU9U	-.1U8U	-.113U	-.U86U	-.U74U						
135.UU0				.299U	.261U	-.U7UU	-.U72U	-.U52U							
15U.UU0		-.1U7U	-.119U	-.U78U	-.U86U	-.U96U	-.111U	-.U82U							
165.UU0		-.123U		-.U9UU	-.U51U	-.U4UU	-.U62U	-.U88U							
18U.UU0		-.123U	-.113U	-.U82U											

MACH (3) = 3.5U2 BETAT (1) = -8.73U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.U075	.U188	.U339	.U6U2	.1355	.15U6	.1581	.1732	.1958	.2259	.2711	.32U0	.3953	.512U
PHI															
.UU0	.UUUU	.UUUU	.UUUU	.UU8U	-.U12U	.U37U			.145U		.U82U	.U31U	.U38U	.U15U	-.U31U
2U.UU0			.417U	.U32U	-.U17U	.U69U			.196U		.1U9U				
4U.UU0			.582U	.128U	.U61U	.U76U			.277U		.145U	.1U4U	.U38U	-.U17U	.U19U
55.UU0			.634U	.207U	.155U	.157U			.179U		.291U				
7U.UU0			.718U	.227U	.16UU	.16UU			.2UU		.25UU	.179U	.U6UU	.U51U	.U32U
9U.UU0		.UUUU	.733U	.247U	.168U	.168U			.186U		.236U	.144U	.U6UU	.U36U	.U18U
12U.UU0			.657U	.25UU	.2U2U	.232U			.3U7U		.141U	.U29U	.U3UU	.U11U	-.U14U
142.UU0										.15UU					
15U.UU0			.554U	.2U2U	.182U	.238U			.745U		.U27U	-.U03U	-.U11U	.UUUU	-.U15U
157.UU0								.85UU							
162.UU0									.813U						
165.UU0											.U6BU	-.U04U	-.U07U	.U01U	.U42U
169.UU0									.739U						
172.UU0							.7491								
18U.UU0	.U44U	.U4UU	.39UU	.161U	.143U	.16UU			.9U5U		-.U44U	-.U55U	-.U68U	-.U76U	-.U96U
X/LB	.5873	.6628	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392					
PHI															
.UU0	-.U33U							-.U74U		-.U85U					
4U.UU0	.U48U	.U88U		.18UU	.144U	.U97U	.U53U			-.U99U					

AMES 87-707 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNBU7)

MACH (3) = 3.502 BETAT (1) = -8.730

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0240	-.0500	-.0430	-.0280	.0270	.0200	.0040		
90.000		-.0150	-.0330	-.0310	.0220	.0470	.0510	.0450		
105.000				.0360	.0520	.0990	.0860	.0470		
110.000									.0380	
120.000		-.0290	-.0380	.2650	.2280	.0570	.0670	.0500	.0460	
135.000				.1810	.2200	-.0220	-.0210	-.0220		
150.000		-.0240	-.0340	.0040	.0340	-.0640	-.0450	-.0320		
165.000		-.0240		.0060	.0470	.0060	.0720	.0110		
180.000		-.1010	-.0950	-.0880						

MACH (3) = 3.502 BETAT (2) = -6.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0240	.0030	.0180			.1010		.0850	.0600	.0450	.0110	-.0170
20.000			.4000	.0390	.0060	.0580			.0610		.1120				
40.000			.5370	.1030	.0490	.1080			.1980		.1660	.0940	.0370	.0040	-.0070
55.000			.5570	.1660	.1140	.1160			.1480		.2500				
70.000			.6530	.1870	.1220	.1140			.1490		.2180	.1540	.0680	.0360	.0100
90.000		.0000	.6730	.2080	.1300	.1320			.1170		.1620	.0960	.0680	.0260	-.0010
120.000			.6160	.2220	.1750	.1950			.2400		.1160	.0120	-.0040	.0030	-.0200
142.000										.1150					
150.000			.5400	.1920	.1730	.2160			.6930		.0180	-.0060	-.0230	-.0150	-.0270
157.000								.8240							
162.000									.7790						
165.000											.0010	-.0190	-.0200	-.0240	-.0140
169.000									.7310						
172.000							.7680								
180.000	.0000	.0000	.4040	.1650	.1480	.1700			.9250		-.0390	-.0510	-.0560	-.0710	-.0820

X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0480							-.0740		-.0780
40.000	-.0140	.0320		.1160	.1120	.0660	.0370			-.0700
70.000		-.0370	-.0640	-.0570	-.0480	.0010	.0000	-.0140		
90.000		-.0280	-.0480	-.0480	-.0060	.0230	.0320	.0210		
105.000				.0080	.0240	.0540	.0480	.0210		
110.000									.0160	
120.000		-.0410	-.0480	.2250	.1720	.0280	.0290	.0270	.0240	
135.000				.1370	.1940	-.0270	-.0310	-.0350		
150.000		-.0340	-.0410	.0020	.0280	-.0630	-.0450	-.0390		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB07)

MACH (3) = 3.502 BETAT (2) = -6.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0300		.0010	.0380	.0150	.0580	-.0010		
180.000		-.0980	-.0820	-.0660						

MACH (3) = 3.502 BETAT (3) = -4.340

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0186	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0370	.0110	-.0070			.0250		.0610	.0850	.0520	.0330	-.0020
20.000			.4320	.0450	.0120	.0220			.0290		.1190				
40.000			.5170	.1010	.0540	.1030			.0360		.1700	.0700	.0340	.0000	-.0140
55.000			.5360	.1350	.0910	.0900			.1120		.2100				
70.000			.5920	.1510	.0910	.0880			.1060		.1340	.1070	.0480	.0160	-.0050
90.000		.0000	.6090	.1680	.0980	.1060			.0790		.1130	.0300	.0410	.0120	-.0130
120.000			.5690	.1940	.1450	.1610			.1920		.0870	-.0070	-.0320	-.0160	-.0270
142.000										.0900					
150.000			.5160	.1800	.1590	.1970			.6390		.0060	-.0180	-.0390	-.0370	-.0360
157.000								.8000							
162.000									.7480						
165.000											-.0140	-.0360	-.0350	-.0410	-.0290
169.000									.7270						
172.000							.7900								
180.000	.0000	.0000	.4110	.1690	.1520	.1760			.9440		-.0450	-.0540	-.0570	-.0520	-.0620

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0400							-.0680		-.0680
40.000	-.0190	-.0180		.0040	.0730	.0230	.0070			-.0780
70.000		-.0510	-.0740	-.0670	-.0580	-.0230	-.0280	-.0290		
90.000		-.0420	-.0600	-.0510	-.0200	-.0070	-.0050	-.0060		
105.000				-.0070	.0010	.0040	.0040	-.0010		
110.000									-.0020	
120.000		-.0480	-.0560	.1260	.1300	.0060	-.0140	.0080	.0030	
135.000				.1290	.1800	-.0380	-.0480	-.0390		
150.000		-.0450	-.0470	.0070	.0420	-.0590	-.0500	-.0430		
165.000		-.0370		.0050	.0510	.0300	.0460	.0050		
180.000		-.0770	-.0780	-.0400						

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AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU7)

MACH (3) = 3.502 BETAT (4) = -2.140

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5127
PHI															
.000	.0000	.0000	.0000	.0370	.0030	-.0090			.0030		.0720	.0800	.0660	.0650	.0620
20.000			.4550	.0540	.0020	-.0080			.0020		.0820				
40.000			.5160	.0950	.0360	.0720			.0120		.1820	.0610	.0230	.0020	-.0040
55.000			.5200	.1150	.0770	.0750			.0850		.0970				
70.000			.3330	.1140	.0680	.0730			.0750		.0870	.0310	.0230	.0000	-.0170
90.000		.0000	.5420	.1270	.0720	.0810			.0540		.0700	-.0070	-.0050	.0000	-.0260
125.000			.5200	.1610	.1210	.1280			.1420		.0520	-.0340	-.0440	-.0280	-.0320
142.000										.0660					
150.000			.4870	.1630	.1470	.1790			.5840		-.0170	-.0420	-.0490	-.0510	-.0390
157.000								.7860							
162.000									.7120						
165.000											-.0370	-.0560	-.0470	-.0510	-.0400
169.000									.7200						
172.000							.8410								
180.000	.0000	.0000	.4090	.1660	.1540	.1840			.9500		-.0610	-.0610	-.0540	-.0520	-.0530
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0350							-.0670		-.0660					
40.000	-.0220	-.0370		.0620	.0090	.0030	-.0220			-.0890					
70.000		-.0600	-.0740	-.0710	-.0610	-.0380	-.0500	-.0480							
90.000		-.0520	-.0680	-.0570	-.0400	-.0270	-.0290	-.0260							
105.000				-.0240	-.0210	-.0200	-.0210	-.0210							
110.000									-.0220						
120.000		-.0500	-.0600	.1000	.0890	-.0200	-.0350	-.0190	-.0140						
135.000				.1550	.1740	-.0410	-.0500	-.0360							
150.000		-.0430	-.0480	.0210	.0750	-.0460	-.0410	-.0210							
165.000		-.0390		-.0050	.0770	.0570	.0590	.0040							
180.000		-.0460	-.0450	-.0340											

MACH (3) = 3.502 BETAT (5) = 2.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5127
PHI															
.000	.0000	.0000	.0000	.0390	.0030	-.0070			.0090		.0730	.0870	.0720	.0650	.0630
20.000			.4400	.0480	.0010	-.0090			-.0020		.0500				
40.000			.4810	.0710	.0160	-.0010			.0000		.0540	.0480	.0410	.0140	-.0280
55.000			.4790	.0800	.0410	.0330			.0370		.0150				
70.000			.4320	.0670	.0280	.0370			.0380		.0250	-.0200	-.0300	-.0170	-.0340
90.000		.0000	.4270	.0690	.0270	.0370			.0240		.0280	-.0330	-.0450	-.0240	-.0490
125.000			.4290	.1120	.0730	.0780			.0550		.0190	-.0530	-.0620	-.0600	-.0410

AMES 87-7,7 IA9 OEA + B3 + T9 ORBITER FUSELAGE (RBNB,7)

MACH (3) = 3.502 BETAT (5) = 2.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
142.000										.0320					
150.000			.4350	.1360	.1210	.1480			.4840		-.0230	-.0580	-.0650	-.0620	-.0560
157.000								.7350							
162.000									.6870						
165.000											-.0510	-.0610	-.0640	-.0550	-.0580
169.000									.7180						
172.000							.7660								
180.000	.0000	.0000	.4110	.1650	.1530	.1800			.9480		-.0550	-.0550	-.0520	-.0500	-.0550

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0350							-.0700		-.0690
40.000	-.0510	-.0710		-.0650	-.0390	-.0440	-.0640			-.0850
70.000		-.0710	-.0620	-.0810	-.0710	-.0620	-.0710	-.0620		
90.000		-.0620	-.0760	-.0650	-.0620	-.0440	-.0470	-.0510		
105.000				-.0290	-.0420	-.0460	-.0550	-.0520		
110.000									-.0490	
120.000		-.0450	-.0500	.0990	.0330	-.0480	-.0540	-.0520	-.0450	
135.000				.1250	.1700	-.0480	-.0420	-.0330		
150.000		-.0370	-.0370	.0680	.1480	.0040	-.0050	-.0050		
165.000		-.0370		.0050	.1010	.0080	.0500	.0180		
180.000		-.0460	-.0450	-.0370						

MACH (3) = 3.502 BETAT (6) = 4.460

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0340	.0030	.0010			.0450		.0570	.0830	.0660	.0320	-.0020
20.000			.3860	.0350	-.0010	-.0040			.0110		.0440				
40.000			.4260	.0430	.0020	-.0020			.0030		.0210	.0360	.0420	.0020	-.0430
55.000			.4050	.0440	.0140	.0170			.0180		.0050				
70.000			.3590	.0320	.0000	.0180			.0130		.0040	-.0290	-.0430	-.0250	-.0390
90.000		.0000	.3800	.0360	.0010	.0170			-.0030		.0040	-.0450	-.0510	-.0510	-.0400
120.000			.3790	.0830	.0500	.0520			.0130		-.0010	-.0600	-.0730	-.0690	-.0520
142.000										.0090					
150.000			.4040	.1190	.1060	.1280			.4270		-.0250	-.0620	-.0730	-.0670	-.0630
157.000								.7010							
162.000									.6740						
165.000											-.0610	-.0650	-.0690	-.0570	-.0640
169.000									.7090						
172.000							.7200								

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AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB07)

MACH (3) = 3.502 BETAT (6) = 4.460

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
180.000	.0000	.0000	.4060	.1610	.1510	.1730			.9260		-.0490	-.0520	-.0540	-.0530	-.0660
X/LB	.5873	.6626	.7380	.7869	.8203	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0380							-.0760		-.0750					
45.000	-.0640	-.0780		-.0320	-.0540	-.0500	-.0730			-.0720					
75.000		-.0730	-.0840	-.0790	-.0700	-.0630	-.0680	-.0590							
90.000		-.0610	-.0720	-.0610	-.0550	-.0420	-.0560	-.0600							
105.000				-.0280	-.0360	-.0480	-.0590	-.0610							
110.000									-.0540						
120.000		-.0420	-.0440	.0420	-.0480	-.0460	-.0600	-.0600	-.0550						
135.000				.2690	.2070	-.0370	-.0460	-.0380							
150.000		-.0380	-.0380	.0520	.1760	.0870	-.0190	-.0110							
165.000		-.0570		-.0310	.1110	.0550	.0270	.0190							
180.000		-.0800	-.0750	-.0440											

MACH (3) = 3.502 BETAT (7) = 6.660

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0200	.0000	.0220			.1120		.0810	.0380	.0210	.0050	-.0240
25.000			.3210	.0160	-.0110	.0060			.0380		.0420				
40.000			.3280	.0120	-.0190	-.0020			-.0490		-.0040	-.0220	-.0380	-.0500	-.0660
55.000			.3260	.0060	-.0120	-.0030			-.0420		-.0490				
70.000			.2930	-.0060	-.0220	-.0050			-.0730		-.0080	-.0600	-.0700	-.0410	-.0510
90.000		.0000	.2980	.0060	-.0230	-.0060			-.0290		-.0430	-.0770	-.0750	-.0620	-.0520
120.000			.3290	.0570	.0280	.0270			-.0160		-.0410	-.0990	-.0860	-.0800	-.0640
142.000										-.0100					
150.000			.3640	.1010	.0890	.1110			.0690		-.0550	-.0940	-.0820	-.0800	-.0710
157.000								.6610							
162.000									.0570						
165.000											-.0910	-.0910	-.0730	-.0730	-.0830
169.000									.0690						
172.000							.6660								
180.000	.0000	.0000	.3960	.1550	.1420	.1600			.9120		-.0650	-.0720	-.0690	-.0810	-.0910
X/LB	.5873	.6626	.7380	.7869	.8203	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0480							-.0840		-.0880					
45.000	-.0850	-.0820		-.0510	-.0580	-.0600	-.0690			-.0720					

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB07)

MACH (3) = 3.502 BETAT (7) = 6.660

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0790	-.0890	-.0810	-.0740	-.0580	-.0680	-.0660		
90.000		-.0660	-.0760	-.0690	-.0590	-.0520	-.0640	-.0640		
105.000				-.0230	-.0540	-.0640	-.0730	-.0710		
110.000									-.0730	
120.000		-.0440	-.0540	.0310	-.0110	-.0790	-.0690	-.0730	-.0670	
135.000				.2850	.2180	-.0350	-.0540	-.0520		
150.000		-.0720	-.0750	-.0280	.0630	-.0500	-.0350	-.0320		
165.000		-.0880		-.0630	-.0010	-.0480	-.0240	-.0520		
180.000		-.1020	-.0870	-.0700						

MACH (3) = 3.502 BETAT (8) = 8.850

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3390	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0020	-.0160	.0410			.1510		.0790	.0300	.0380	.0170	-.0310
20.000			.2680	-.0100	-.0240	.0320			.0910		.0410				
40.000			.2860	-.0150	-.0380	.0110			-.0180		-.0340	-.0530	-.0610	-.0740	-.0850
55.000			.2830	-.0220	-.0330	-.0230			-.0110		-.0170				
70.000			.2450	-.0230	-.0430	-.0220			-.0110		-.0190	-.0500	-.0590	-.0590	-.0540
90.000		.0000	.2490	-.0140	-.0410	-.0210			-.0440		-.0540	-.0740	-.0780	-.0680	-.0520
120.000			.2840	.0330	.0090	.0060			-.0190		-.0450	-.0840	-.0930	-.0860	-.0710
142.000										-.0240					
150.000			.3310	.0830	.0760	.0880			.0190		-.0490	-.0840	-.0870	-.0810	-.0740
157.000								.5780							
162.000									.6310						
165.000											-.0620	-.0840	-.0760	-.0850	-.0950
169.000									.6640						
172.000							.6070								
180.000	.0000	.0000	.3850	.1470	.1390	.1440			.8750		-.0490	-.0590	-.0740	-.0850	-.1080

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0330							-.0840		-.0940
40.000	-.0930	-.0870		-.0530	-.0630	-.0650	-.0860			-.0720
70.000		-.0770	-.0860	-.0740	-.0730	-.0540	-.0630	-.0590		
90.000		-.0630	-.0710	-.0650	-.0520	-.0510	-.0570	-.0630		
105.000				-.0320	-.0530	-.0610	-.0730	-.0730		
110.000									-.0720	
120.000		-.0540	-.0670	.0560	.0160	-.0700	-.0740	-.0780	-.0690	
135.000				.1310	.1850	-.0430	-.0450	-.0520		
150.000		-.0980	-.1100	-.0880	-.0650	-.0670	-.0760	-.0780		

AMES 87-7\7 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB\7)

MACH (3) = 3.5\2 BETAT (8) = 8.85\

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6628	.738\	.7869	.8283	.8848	.9262	.9639	1.\\15	1.\392
PHI										
185.\\\		-.113\		-.\84\	-.\62\	-.\44\	-.\59\	-.\81\		
18\.\\\		-.111\	-.1\6\	-.\9\\						

AMES 87-707 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNBU8) (15 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5360 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

MACH (1) = 2.498 BETAT (1) = -8.420

SECTION : 1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2920	.9480	.4380	.0380	.0560	.1610			.0590		.0230	-.0140	-.0180	-.0470	-.0490
20.000			.5280	.0820	.0540	.0940			.0960		.0680				
40.000			.6510	.1860	.1410	.1950			.1400		.0550	-.0050	-.0240	-.0270	.1060
55.000			.6880	.2350	.1850	.3730			.2870		.1920				
70.000			.7020	.2270	.1580	.3990			.3240		.2420	.0780	.0000	-.0120	.0000
90.000		1.1400	.6700	.2150	.1460	.2200			.3650		.3090	.0710	-.0180	-.0220	-.0260
120.000			.5880	.2030	.1590	.2390			.4500		.2170	.0350	-.0300	-.0650	-.0550
142.000										.1260					
150.000			.4900	.1470	.1330	.2080			.6940		-.0010	-.0150	-.0220	-.0340	-.0610
157.000								.7610							
162.000									.6950						
165.000											-.0620	.0110	.0130	-.0220	-.0640
169.000									.5830						
172.000							.7170								
180.000	1.2980	.8700	.3230	.1090	.0860	.1780			.7430		-.1240	-.1260	-.1310	-.1620	-.1650

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0290							-.1220		-.1030
40.000	.1000	.0600		.2210	.1660	.1230	-.0080			-.1230
70.000		-.0280	-.0430	-.0390	-.0460	.0140	-.0110	-.0240		
90.000		-.0210	-.0290	-.0200	.0760	.0380	.0310	.0230		
105.000				.1080	.1400	.0950	.0240	-.0070		
110.000									-.0190	
120.000		-.0800	-.0640	.3940	.3040	.0600	.0170	.0010	-.0690	
135.000				.1360	.1750	-.0710	-.1070	-.1000		
150.000		-.0740	-.0780	-.0220	-.0180	-.1270	-.1070	-.0800		
165.000		-.0680		.0140	.0540	-.0120	.0950	-.0420		
180.000		-.1340	-.1280	-.0790						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBL8)

MACH (1) = 2.490 BETAT (2) = -6.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3390	.3953	.5123
PHI															
.000	1.3115	.9145	.4425	.0615	.0925	.1575			.1155		.0485	.0405	.0065	-.0425	-.0625
20.000			.5175	.0895	.1075	.0915			.1165		.0335				
40.000			.6255	.1685	.1545	.1675			.1585		.0485	-.0155	-.0425	-.0315	.0565
55.000			.6455	.2015	.1665	.3275			.2435		.1625				
70.000			.6405	.1845	.1365	.3795			.2825		.2125	.0445	-.0255	-.0355	-.0345
90.000		1.0915	.6145	.1735	.1245	.1985			.3255		.2645	.0375	-.0375	-.0445	-.0525
125.000			.5485	.1755	.1445	.2125			.3555		.1815	.0015	-.0385	-.0715	-.0695
142.000										.0765					
150.000			.4705	.1365	.1395	.2125			.6595		-.0395	-.0485	-.0445	-.0475	-.0715
157.000								.7645							
162.000									.6655						
165.000											-.0915	-.0455	-.0125	-.0345	-.0715
169.000									.5865						
172.000							.6765								
180.000	1.3115	.8835	.3285	.1145	.1115	.1775			.7675		-.1395	-.1375	-.0975	-.1435	-.1445

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0375							-.1115		-.1015
40.000	.0605	.0515		.1755	.1305	.0985	-.1225			-.1315
70.000		-.0565	-.0685	-.0615	-.0555	.0005	-.0275	-.0445		
90.000		-.0465	-.0565	-.0395	.0465	.0225	.0115	-.0165		
105.000				.0695	.1005	.0245	.0115	-.0295		
115.000									-.0365	
125.000		-.0745	-.0765	.2975	.2615	.0335	.0035	-.0185	-.0265	
135.000				.1365	.1715	-.0425	-.0935	-.0625		
150.000		-.0815	-.0815	-.0195	.0025	-.1075	-.0885	-.0875		
165.000		-.0765		.0045	.0525	.0335	.0075	-.0595		
180.000		-.1145	-.1095	-.0735						

MACH (1) = 2.490 BETAT (3) = -4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3390	.3953	.5123
PHI															
.000	1.3335	.8955	.4125	.0495	.1045	-.0185			.1835		.0895	.0675	.0485	-.0275	-.0835
20.000			.4765	.0665	.1255	-.0165			.1555		.0575				
40.000			.5755	.1225	.1455	.1275			.1345		.0535	.0085	-.0085	-.0325	.0155
55.000			.5835	.1515	.1355	.2735			.2155		.1495				
70.000			.5735	.1365	.0945	.2235			.2455		.1855	.0385	-.0335	-.0465	-.0515
90.000		1.0425	.5515	.1335	.0855	.1515			.2455		.2335	.0335	-.0355	-.0555	-.0675
125.000			.5075	.1465	.1155	.1675			.2635		.1545	-.0155	-.0485	-.0695	-.0835

AMES 87-7U7 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU8)

MACH (1) = 2.490 BETAT (3) = -4.190

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0370					
150.000			.4520	.1250	.1270	.1910			.6190		-.0480	-.0550	-.0610	-.0570	-.0810
157.000								.7460							
162.000									.6360						
165.000											-.0980	-.0810	-.0380	-.0450	-.0750
169.000									.5910						
172.000							.7160								
180.000	1.3330	.9030	.3360	.1190	.1130	.1690			.7890		-.1260	-.1250	-.0960	-.1010	-.1130

X/LB	.5673	.6826	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0760							-.1090		-.0910
40.000	.0490	.0220		.1350	.0680	.0490	-.0430			-.1420
70.000		-.0760	-.0830	-.0790	-.0620	-.0320	-.0560	-.0630		
90.000		-.0680	-.0730	-.0480	.0160	-.0080	-.0210	-.0360		
105.000				.0440	.0630	-.0070	-.0220	-.0440		
110.000									-.0490	
120.000		-.0800	-.0750	.2330	.2110	.0060	-.0170	-.0360	-.0370	
135.000				.1510	.1890	-.0660	-.0880	-.0710		
150.000		-.0780	-.0710	.0190	.0450	-.0950	-.0590	-.1260		
165.000		-.0720		.0240	.0760	.0480	.0560	-.0230		
180.000		-.0810	-.0780	-.0630						

MACH (1) = 2.490 BETAT (4) = -2.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3480	.9070	.3950	.0270	.1060	-.0060			.1830		.1300	.0650	.0680	-.0380	-.0980
20.000			.4430	.0240	.1150	-.0090			.1940		.1010				
40.000			.5270	.0240	.1020	.0160			.1910		.0630	.0170	.0080	-.0300	-.0210
55.000			.5340	.0420	.0800	.1520			.1750		.1300				
70.000			.5120	.0760	.0500	.1280			.2070		.1700	.0240	-.0450	-.0630	-.0680
90.000		.9080	.4880	.0750	.0450	.1040			.1810		.1990	.0210	-.0430	-.0780	-.0790
125.000			.4610	.1100	.0820	.1240			.1960		.1010	-.0290	-.0580	-.0750	-.0900
142.000										.0440					
150.000			.4250	.1090	.1120	.1630			.5720		-.0640	-.0900	-.0770	-.0660	-.0770
157.000								.7180							
162.000									.6050						
165.000											-.1080	-.1070	-.0740	-.0520	-.0680
169.000									.5830						
172.000							.7370								

AMES 67-707 IA9 OPA + S3 + T9 ORBITER FUSELAGE (RBNB08)

MACH (1) = 2.498 BETAT (4) = -2.070

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3460	.9150	.3370	.1100	.1150	.1690			.7970		-.1310	-.1190	-.1090	-.0760	-.0630
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0840							-.1180		-.0780					
40.000	.0210	.0070		.0790	.0410	-.0690	-.0890			-.1140					
70.000		-.0930	-.0980	-.0910	-.0570	-.0650	-.0880	-.0720							
90.000		-.0830	-.0810	-.0340	-.0060	-.0370	-.0580	-.0520							
105.000				.0210	.0340	-.0390	-.0550	-.0560							
110.000									-.0610						
120.000		-.0790	-.0720	.1480	.1460	-.0380	-.0500	-.0360	-.0450						
135.000				.1530	.2010	-.0810	-.0850	-.0360							
150.000		-.0690	-.0660	.0570	.0860	-.0690	-.0270	.0150							
165.000		-.0640		.0670	.0990	.0320	.0230	-.0220							
180.000		-.0680	-.0680	-.0620											

MACH (1) = 2.498 BETAT (5) = 2.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3370	.9080	.3990	.0380	.1070	-.0040			.1940		.1220	.0680	.0680	-.0370	-.0960
20.000			.4100	.0260	.1060	-.0160			.1660		.1300				
40.000			.4490	.0270	.0780	-.0080			.1730		.0830	.0290	.0230	-.0610	-.0900
55.000			.4390	.0310	.0260	.0140			.0440		.1050				
70.000			.3960	.0180	-.0060	.0570			.0460		.1350	.0030	-.0570	-.0740	-.0900
90.000		.8650	.3680	.0110	-.0120	.0410			.0670		.0750	-.0050	-.0570	-.0810	-.0930
120.000			.3600	.0500	.0260	.0470			.0740		.0440	-.0980	-.0750	-.0830	-.0760
142.000										-.0490					
150.000			.3600	.0720	.0800	.1260			.4610		-.0900	-.1290	-.1190	-.0660	-.0450
157.000								.6890							
162.000									.5560						
165.000											-.1340	-.1370	-.1130	-.0690	-.0410
169.000									.5830						
172.000							.7660								
180.000	1.3370	.9140	.3310	.1150	.1170	.1660			.7830		-.1360	-.1220	-.1060	-.0760	-.0690
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0840							-.0970		-.0690					
40.000	-.0050	.0260		-.0170	-.0400	-.0350	-.1130			-.0730					

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU8)

MACH (1) = 2.496 BETAT (5) = 2.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0980	-.1000	-.0920	-.0690	-.0680	-.0840	-.0870		
90.000		-.0820	-.0820	-.0460	-.0550	-.0520	-.0660	-.0760		
105.000				-.0260	-.0320	-.0520	-.0650	-.0830		
110.000									-.0780	
120.000		-.0730	-.0680	.0960	.0520	-.0510	-.0690	-.0550	-.0530	
135.000				.2400	.2130	-.0520	-.0580	-.0160		
150.000		-.0610	-.0680	.0860	.2040	-.0230	-.0010	-.0140		
165.000		-.0560		.0290	.1540	.1160	.0550	-.0270		
180.000		-.0700	-.0710	-.0640						

MACH (1) = 2.496 BETAT (6) = 4.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5129
PHI															
.000	1.3260	.9060	.4200	.0580	.1020	-.0010			.1770		.0800	.0630	.0430	-.0310	-.0830
20.000			.4070	.0510	.0870	-.0020			.1950		.0990				
40.000			.4130	.0310	.0720	-.0100			.1150		.0640	.0030	-.0100	-.0760	-.1030
55.000			.3880	.0060	.0080	-.0140			.0080		.0960				
70.000			.3420	-.0130	-.0230	.0260			.0170		.1120	-.0040	-.0570	-.0810	-.0990
90.000		.8030	.3110	-.0140	-.0270	.0150			.0460		.0180	-.0220	-.0570	-.0840	-.1060
120.000			.3120	.0260	-.0020	.0200			.0270		-.0290	-.1110	-.1020	-.0815	-.0685
142.000										-.0710					
150.000			.3340	.0630	.0620	.1130			.0470		-.1020	-.1400	-.1280	-.0790	-.0460
157.000								.6430							
162.000									.5420						
165.000											-.1440	-.1425	-.1220	-.0840	-.0480
180.000									.5860						
172.000							.7120								
180.000	1.3080	.9110	.3340	.1120	.1120	.1610			.7760		-.1290	-.1250	-.1010	-.1030	-.1160

X/LB	.3873	.6626	.7380	.7869	.8283	.8849	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0880							-.1160		-.0890
40.000	-.0240	.0430		-.0470	-.0440	-.0740	-.1460			-.0840
70.000		-.0940	-.0980	-.0940	-.0730	-.0860	-.1030	-.0950		
90.000		-.0780	-.0850	-.0530	-.0580	-.0670	-.0890	-.0840		
105.000				-.0090	-.0370	-.0650	-.0910	-.0880		
110.000									-.0780	
120.000		-.0740	-.0710	.0660	.0310	-.0960	-.0960	-.0850	-.0650	
135.000				.3090	.2300	-.0960	-.0670	-.0540		
150.000		-.0800	-.0670	.0950	.2450	.0070	-.0670	-.0220		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU8)

MACH (1) = 2.498 BETAT (6) = 4.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0620		-.0320	.1890	.0640	.0150	-.0150		
180.000		-.0840	-.0850	-.0630						

MACH (1) = 2.498 BETAT (7) = 6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3000	.9110	.4380	.0510	.0840	.1840			.1150		.0480	.0460	.0070	-.0460	-.0500
20.000			.4080	.0500	.0580	-.0040			.1860		.0440				
40.000			.3840	.0500	.0370	-.0260			.1160		.0020	-.0300	-.0480	-.1030	-.0890
55.000			.3480	-.0170	-.0150	-.0190			-.0070		.0640				
70.000			.2990	-.0440	-.0420	-.0030			.0010		.0590	-.0220	-.0640	-.0950	-.1090
90.000		.7430	.2580	-.0510	-.0450	-.0070			.0310		.0010	-.0560	-.0700	-.0930	-.1020
120.000			.2680	-.0060	-.0210	.0060			.0060		-.0590	-.1300	-.1250	-.0860	-.0640
142.000										-.0900					
150.000			.3000	.0410	.0490	.0880			.3580		-.1200	-.1540	-.1410	-.0920	-.0540
157.000								.5740							
162.000									.5310						
165.000											-.1600	-.1520	-.1280	-.1110	-.0940
169.000									.5790						
172.000							.6280								
180.000	1.3000	.8950	.3200	.1040	.1110	.1510			.7610		-.1290	-.1340	-.1050	-.1490	-.1470

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0400							-.1220		-.1050
40.000	-.0350	.0030		-.0400	-.0880	-.0910	-.1170			-.0990
70.000		-.0900	-.1030	-.1060	-.0890	-.0910	-.1010	-.0990		
90.000		-.0800	-.0900	-.0620	-.0690	-.0780	-.0930	-.0830		
105.000				-.0240	-.0580	-.0780	-.0990	-.0960		
110.000									-.0950	
120.000		-.0840	-.0800	.0390	.0030	-.1110	-.1080	-.0890	-.0840	
135.000				.3910	.2660	-.1140	-.0970	-.0750		
150.000		-.0790	-.0600	.0530	.1760	-.0710	-.0560	-.0480		
165.000		-.0850		-.0570	.1110	.0010	.0040	-.0470		
180.000		-.1100	-.1100	-.0790						

AMES 87-707 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNBU8)

MACH (1) = 2.490 BETAT (8) = 8.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2840	.9060	.4230	.0390	.0540	.1850			.0510		.0160	-.0110	-.0190	-.0450	-.0470
20.000			.3930	.0210	.0390	.1460			.0530		.0250				
40.000			.3580	.0010	.0060	-.0700			.0450		-.0650	-.0720	-.0960	-.1160	-.1110
55.000			.3160	-.0370	-.0440	-.0370			-.0390		-.0690				
70.000			.2540	-.0630	-.0610	-.0280			-.0060		.0290	-.0250	-.0730	-.1020	-.1110
90.000		.6890	.2170	-.0670	-.0600	-.0340			-.0250		-.0020	-.0820	-.0760	-.0960	-.0970
125.000			.2290	-.0250	-.0390	-.0460			.0080		-.0870	-.1490	-.1370	-.0880	-.0690
142.000										-.1080					
150.000			.2750	.0320	.0340	.0220			.0960		-.1300	-.1640	-.1470	-.1060	-.0910
157.000								.4980							
162.000									.5060						
165.000											-.1690	-.1590	-.1340	-.1500	-.1500
169.000									.5590						
172.000							.5210								
180.000	1.2840	.8820	.3160	.1000	.1060	.1700			.7290		-.1250	-.1260	-.1370	-.1670	-.1720

X/LB	.5673	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0310							-.1280		-.1150
40.000	-.0710	-.0860		-.1120	-.0500	-.1120	-.1230			-.1070
70.000		-.0840	-.1080	-.1070	-.0910	-.0840	-.0990	-.1030		
90.000		-.0750	-.0980	-.0760	-.0650	-.0750	-.1040	-.0980		
105.000				-.0320	-.0650	-.0770	-.0990	-.1070		
110.000									-.1090	
125.000		-.0690	-.0840	.0760	.0050	-.1170	-.1200	-.1050	-.0960	
135.000				.3750	.3000	-.1180	-.0810	-.0740		
150.000		-.1120	-.1240	-.0470	-.0760	-.1180	-.0990	-.1050		
165.000		-.1330		-.0820	.0040	-.0800	-.0210	-.1180		
180.000		-.1380	-.1270	-.0800						

MACH (2) = 2.999 BETAT (1) = -8.580

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3080	.7750	.3560	.0240	.0020	.0520			.1330		.0310	.0080	.0170	-.0220	-.0270
20.000			.4260	.0580	.0090	.1450			.1680		.0630				
40.000			.5700	.1430	.0890	.3740			.2010		.0840	.0550	-.0160	-.0090	.0230
95.000			.6440	.1590	.1590	.2840			.3430		.2380				
70.000			.6810	.2210	.1560	.2000			.4040		.2860	.1210	.0340	.0210	.0100
90.000		1.1540	.6760	.2250	.1550	.2010			.2420		.3150	.1180	.0300	.0080	-.0080
120.000			.5930	.2160	.1760	.2160			.3110		.1620	.0500	.0180	-.0240	-.0430

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB08)

MACH (2) = 2.999 BETAT (1) = -8.58

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3206	.3953	.5126
PHI															
142.000										.1210					
150.000			.4930	.1670	.1510	.2080			.6670		-.0060	-.0240	-.0670	-.0120	-.0280
157.000								.7530							
162.000									.7010						
165.000											-.0330	-.0250	-.0030	.0100	-.0240
169.000									.6170						
172.000							.6590								
180.000	1.3080	.8820	.3380	.1300	.1110	.1310			.7750		-.0830	-.0900	-.0880	-.1040	-.1250

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0425							-.1230		-.0960
40.000	.0620	.0780		.2000	.1620	.0990	.0210			-.0830
75.000		-.0290	-.0530	-.0440	-.0340	-.0020	-.0180	-.0060		
90.000		-.0220	-.0410	-.0360	.0560	.0240	.0190	.0370		
105.000				.0510	.0840	.1060	.0350	.0290		
115.000									.0650	
120.000		-.0450	-.0510	.2960	.2390	.0640	.0190	.0350	.0240	
135.000				.1530	.1820	-.0530	-.0870	-.0520		
150.000		-.0490	-.0540	-.0120	.0060	-.1230	-.1070	-.0390		
165.000		-.0460		.0070	.0370	-.0400	.0430	-.0010		
180.000		-.1140	-.1030	-.0780						

MACH (2) = 2.999 BETAT (2) = -6.42

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3206	.3953	.5126
PHI															
.000	1.3380	.8120	.3860	.1300	.0970	.0170			.1480		.0420	.0180	.0510	-.0120	-.0340
20.000			.4440	.0610	.0970	.0350			.1950		.0580				
40.000			.5460	.1360	.0760	.3000			.1870		.1060	.0500	-.0120	-.0160	-.0110
55.000			.5930	.1330	.1260	.1630			.3050		.2070				
70.000			.6210	.1790	.1170	.1580			.1610		.2630	.0990	.0180	.0040	-.0130
90.000		1.1080	.6190	.1780	.1150	.1560			.1700		.2690	.1040	.0190	-.0040	-.0270
120.000			.5540	.1780	.1460	.1790			.2610		.1060	.0170	.0070	-.0330	-.0470
142.000										.0850					
150.000			.4770	.1780	.1450	.1900			.6230		-.0190	-.0410	-.0320	-.0280	-.0440
157.000								.7310							
162.000									.6720						
165.000											-.0460	-.0490	-.0340	-.0080	-.0310
169.000									.6150						
172.000							.6650								

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU8)

MACH (2) = 2.999 BETAT (2) = -6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3380	.9030	.3420	.1280	.1150	.1440			.7920		-.0850	-.0930	-.0820	-.1000	-.1140

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0580							-.0910		-.0850
40.000	.0650	.0490		.1550	.1310	.0710	.0140			-.0950
70.000		-.0490	-.0690	-.0630	-.0470	-.0090	-.0170	-.0260		
90.000		-.0420	-.0580	-.0530	.0120	.0160	.0150	.0090		
105.000				.0200	.0380	.0610	.0260	.0060		
110.000									.0600	
120.000		-.0560	-.0610	.2280	.1840	.0600	.0160	.0110	.0000	
135.000				.1350	.1670	-.0640	-.0700	-.0590		
150.000		-.0570	-.0650	-.0230	-.0620	-.1020	-.0830	-.0570		
165.000		-.0570		-.0120	.0290	-.0090	.0530	-.0070		
180.000		-.0970	-.0940	-.0610						

MACH (2) = 2.999 BETAT (3) = -4.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3680	.8400	.3910	.0390	.0440	-.0250			.1360		.1040	.0460	.0740	.0170	-.0340
20.000			.4450	.0600	.0380	-.0260			.2380		.0860				
40.000			.5280	.1210	.0720	.0710			.1690		.0970	.0450	-.0040	-.0170	-.0150
55.000			.5520	.1440	.1010	.1250			.2550		.1720				
70.000			.5660	.1460	.0850	.1190			.1290		.2340	.0780	.0050	-.0110	-.0290
90.000		1.0660	.5650	.1500	.0830	.1210			.1120		.2020	.0720	.0090	-.0170	-.0450
120.000			.5160	.1630	.1210	.1480			.2060		.0740	-.0220	-.0110	-.0350	-.0550
142.000										.0590					
150.000			.4580	.1450	.1290	.1740			.5840		-.0310	-.0490	-.0540	-.0410	-.0480
157.000								.7180							
162.000									.6470						
165.000											-.0550	-.0660	-.0510	-.0330	-.0380
169.000									.6170						
172.000							.6840								
180.000	1.3680	.9240	.3520	.1340	.1190	.1490			.8140		-.0860	-.0930	-.0810	-.0740	-.0610

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0840							-.1020		-.0740
40.000	.0320	.0460		.1360	.0960	.0320	-.0150			-.1030

DATE 17 SEP 73 TABULATED PRESSURE DATA - 1A9C

AMES 87-7U7 1A9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU#0)

MACH (2) = 2.999 BETAT (3) = -4.26U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.065U	-.084U	-.078U	-.059U	-.040U	-.051U	-.045U		
90.000		-.057U	-.073U	-.064U	-.017U	-.020U	-.022U	-.012U		
105.000				-.006U	.006U	.023U	-.009U	-.017U		
110.000									.038U	
120.000		-.065U	-.089U	.161U	.131U	.000U	-.014U	-.006U	-.013U	
135.000				.124U	.154U	-.077U	-.085U	-.053U		
150.000		-.061U	-.065U	-.006U	.020U	-.097U	-.085U	-.059U		
165.000		-.058U		-.004U	.034U	.011U	.019U	-.018U		
180.000		-.078U	-.072U	-.066U						

MACH (2) = 2.999 BETAT (4) = -2.11U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3209	.3953	.5129
PHI															
.000	1.3880	.8190	.3900	.0350	.0430	-.0180			.0580		.1490	.0910	.0580	.0340	-.0300
20.000			.4240	.0420	.0430	-.0230			.0140		.1040				
40.000			.4900	.0880	.0450	.0520			.0490		.1120	.0420	.0430	-.0020	-.0210
55.000			.5040	.1970	.0670	.1190			.1050		.1470				
70.000			.5050	.2050	.0520	.0850			.0930		.1790	.0580	-.0120	-.0230	-.0420
90.000		1.0110	.5020	.1080	.0500	.0870			.0650		.1140	.0420	-.0240	-.0300	-.0510
120.000			.4710	.1330	.0940	.1110			.0630		.0460	-.0510	-.0360	-.0380	-.0590
142.000										.0340					
150.000			.4340	.1300	.1180	.1550			.0410		-.0460	-.0700	-.0700	-.0500	-.0480
157.000								.7010							
162.000									.0250						
165.000											-.0710	-.0850	-.0680	-.0540	-.0420
168.000									.0210						
172.000							.7150								
180.000	1.3860	.9300	.3510	.1350	.1210	.1550			.0310		-.0950	-.0920	-.0770	-.0670	-.0570

X/LB	.2973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0720							-.1170		-.0730
40.000	-.0310	.0200		.0780	.0530	-.0030	-.0650			-.1130
70.000		-.0770	-.0920	-.0910	-.0670	-.0770	-.0860	-.0630		
90.000		-.0690	-.0850	-.0710	-.0390	-.0550	-.0570	-.0380		
105.000				-.0220	-.0190	-.0260	-.0490	-.0380		
110.000									.0190	
120.000		-.0690	-.0720	.0910	.0850	-.0550	-.0500	-.0250	-.0270	
135.000				.1090	.1580	-.0950	-.0980	-.0420		
150.000		-.0600	-.0810	.0260	.0670	-.0870	-.0640	-.0140		

AMES 87-767 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB08)

MACH (2) = 2.999 BETAT (4) = -2.100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0530		.0290	.0720	.0000	-.0420	-.0170		
180.000		-.0540	-.0570	-.0490						

MACH (2) = 2.999 BETAT (5) = 2.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0335	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3320	.3953	.5120
PHI															
.000	1.3820	.8510	.3900	.0270	.0330	-.0270			.0560		.1360	.0810	.0650	.0250	-.0540
20.000			.4040	.0310	.0310	-.0290			.0420		.1370				
40.000			.4370	.0560	.0290	-.0240			.0620		.0940	.0490	.0150	-.0050	-.0550
55.000			.4270	.0630	.0190	.0380			.0130		.0530				
70.000			.4020	.0620	.0030	.0320			.0320		.0340	.0090	-.0330	-.0420	-.0620
90.000		.8860	.3860	.0440	-.0020	.0320			.0130		.0290	-.0510	-.0400	-.0440	-.0640
120.000			.3780	.0810	.0410	.0560			.0560		-.0110	-.0880	-.0810	-.0590	-.0520
142.000										-.0120					
150.000			.3860	.1030	.0870	.1220			.0430		-.0650	-.0990	-.0920	-.0760	-.0450
157.000								.6650							
162.000									.0920						
165.000											-.0960	-.1070	-.0860	-.0740	-.0460
169.000									.0130						
172.000							.7230								
180.000	1.3820	.9420	.3520	.1310	.1180	.1530			.0210		-.1010	-.0950	-.0810	-.0720	-.0590

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0730							-.0980		-.0750
40.000	-.0840	-.0690		.0240	-.0170	-.0350	-.0820			-.0940
70.000		-.0910	-.1010	-.0940	-.0740	-.0750	-.0830	-.0770		
90.000		-.0790	-.0890	-.0720	-.0720	-.0540	-.0590	-.0590		
105.000				-.0530	-.0660	-.0460	-.0530	-.0580		
110.000									.0220	
120.000		-.0560	-.0630	.0640	.0160	-.0830	-.0710	-.0440	-.0390	
135.000				.1890	.1650	-.0830	-.0660	-.0460		
150.000		-.0420	-.0460	.0750	.1430	-.0240	-.0070	-.0140		
165.000		-.0370		.0690	.1080	.0840	.0430	-.0030		
180.000		-.0590	-.0580	-.0530						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU8)

MACH (2) = 2.999 BETAT (6) = 4.37U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3590	.8570	.3950	.0420	.0340	-.0230			.1340		.1110	.0490	.0690	.0490	-.0480
20.000			.3940	.0380	.0300	-.0240			.0330		.1340				
40.000			.4150	.0420	.0170	-.0230			-.0130		.0610	.0430	.0030	-.0340	-.0730
55.000			.3970	.0390	.0010	-.0440			-.0100		.0150				
70.000			.3580	.0380	-.0190	.0110			.0130		.0090	-.0350	-.0250	-.0490	-.0660
90.000		.8140	.3260	.0150	-.0240	.0090			-.0060		.0110	-.0630	-.0650	-.0480	-.0720
120.000			.3300	.0520	.0260	.0320			.0210		-.0220	-.0910	-.0910	-.0790	-.0550
142.000										-.0290					
150.000			.3450	.0840	.0730	.1050			.0790		-.0660	-.1040	-.0990	-.0850	-.0480
157.000								.6310							
162.000									.0710						
165.000											-.1010	-.1030	-.0940	-.0810	-.0670
169.000									.0050						
172.000							.6370								
180.000	.3590	.0290	.3470	.1270	.1140	.1440			.0820		-.0870	-.0890	-.0840	-.0780	-.0960

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0670							-.1000		-.0810
40.000	-.0950	-.0280		-.0080	-.0280	-.0720	-.0980			-.0730
70.000		-.0920	-.0940	-.0880	-.0760	-.0810	-.0880	-.0780		
90.000		-.0790	-.0880	-.0670	-.0690	-.0630	-.0720	-.0680		
105.000				-.0390	-.0540	-.0680	-.0730	-.0710		
110.000									-.0650	
120.000		-.0520	-.0620	.0370	-.0130	-.0940	-.0840	-.0560	-.0510	
135.000				.1820	.1950	-.0680	-.0680	-.0540		
150.000		-.0440	-.0480	.0710	.2150	-.0420	-.0410	-.0180		
165.000		-.0500		-.0380	.1200	.0670	.0290	.0110		
180.000		-.0830	-.0760	-.0700						

MACH (2) = 2.999 BETAT (7) = 6.54U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3310	.8200	.3680	.0230	.0140	.0110			.1490		.0480	.0260	.0320	-.0160	-.0350
20.000			.3600	.0150	.0080	-.0160			.1010		.0740				
40.000			.3660	.0180	-.0090	-.0320			-.0060		.0320	-.0170	-.0190	-.0610	-.0880
55.000			.3390	.0110	-.0240	-.0220			-.0120		.0070				
70.000			.2960	.0120	-.0400	-.0120			-.0080		.0040	-.0450	-.0330	-.0550	-.0720
90.000		.7440	.2740	-.0090	-.0430	-.0120			-.0250		-.0140	-.0730	-.0760	-.0520	-.0730
120.000			.2870	.0300	-.0080	.0060			-.0100		-.0470	-.1040	-.1040	-.0880	-.0510

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB08)

MACH (2) = 2.999 BETAT (7) = 6.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
142.000										-.0460					
150.000			.3150	.0680	.0580	.0870			.3310		-.0780	-.1120	-.1070	-.0940	-.0570
157.000								.5670							
162.000									.5570						
165.000											-.1140	-.1120	-.0960	-.0920	-.0970
169.000									.5920						
172.000							.5880								
180.000	1.3310	.9120	.3460	.1210	.1110	.1290			.7820		-.0860	-.0930	-.0930	-.1070	-.1250
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0570							-.1110		-.0810					
40.000	-.0910	-.0350		-.0230	-.0580	-.0810	-.1100			-.0780					
70.000		-.0890	-.0910	-.0890	-.0850	-.0960	-.1050	-.0810							
90.000		-.0770	-.0830	-.0700	-.0650	-.0830	-.0960	-.0770							
105.000				-.0380	-.0540	-.0860	-.0960	-.0800							
110.000									-.0500						
120.000		-.0560	-.0750	-.0690	-.0270	-.1160	-.1140	-.0780	-.0680						
135.000				.3300	.2290	-.0710	-.0940	-.0720							
150.000		-.0630	-.0710	.0170	.0290	-.0830	-.0850	-.0390							
165.000		-.0830		-.0520	.0700	-.0370	-.0180	-.0140							
180.000		-.1030	-.0960	-.0620											

MACH (2) = 2.999 BETAT (8) = 9.700

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	1.3000	.7690	.3370	.0230	.0010	.0500			.1340		.0270	.0090	.0140	-.0270	-.0360
20.000			.3190	.0650	-.0140	.0450			.0880		.0050				
40.000			.3080	-.0040	-.0280	-.0190			.0220		-.0310	-.0640	-.0760	-.0920	-.1000
55.000			.2830	-.0180	-.0410	-.0300			-.0230		-.0110				
70.000			.2410	-.0340	-.0570	-.0320			-.0210		.0030	-.0430	-.0610	-.0640	-.0790
90.000		.6750	.2220	-.0380	-.0590	-.0340			-.0420		-.0370	-.0800	-.0850	-.0620	-.0770
120.000			.2420	.0040	-.0170	-.0190			-.0020		-.0720	-.1200	-.1160	-.0960	-.0550
142.000										-.0620					
150.000			.2840	.0530	.0460	.0480			.2880		-.0910	-.1250	-.1130	-.0960	-.0850
157.000								.4890							
162.000									.5410						
165.000											-.1260	-.1190	-.1010	-.1120	-.1240
169.000									.5750						
172.000							.5280								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB08)

MACH (2) = 2.999 BETAT (8) = 8.700

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3000	.8910	.3290	.1150	.1060	.1290			.7580		-.0880	-.0950	-.1030	-.1160	-.1380
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0420							-.1180		-.0950					
40.000	-.0940	-.0520		-.0510	-.0910	-.1070	-.1140			-.0820					
70.000		-.0840	-.0920	-.0880	-.0850	-.1070	-.1140	-.0850							
90.000		-.0770	-.0780	-.0720	-.0590	-.0870	-.1120	-.0790							
105.000				-.0320	-.0590	-.0970	-.1130	-.0850							
110.000									-.0350						
120.000		-.0680	-.0760	.0500	-.0060	-.1210	-.1130	-.0870	-.0750						
135.000				.2700	.2010	-.0750	-.0850	-.0580							
150.000		-.1090	-.1110	-.0670	-.0920	-.1220	-.1080	-.0790							
165.000		-.1260		-.0880	-.0610	-.0750	-.0670	-.0910							
180.000		-.1250	-.1110	-.0860											

MACH (3) = 3.502 BETAT (1) = -8.720

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0140	-.0140	.0340			.1590		.0640	.0230	.0170	.0070	-.0420
20.000			.4020	.0410	-.0080	.0660			.1620		.0890				
40.000			.5530	.1310	.0670	.1020			.2580		.1250	.0840	.0260	-.0260	.0110
55.000			.5800	.2020	.1490	.1740			.3970		.2600				
70.000			.6810	.2200	.1500	.1810			.1910		.3190	.1610	.0680	.0340	.0110
90.000		.0000	.6850	.2300	.1520	.1730			.1890		.2710	.1490	.0700	.0230	-.0030
120.000			.5990	.2210	.1770	.2070			.2650		.1330	.0340	.0290	-.0040	-.0310
142.000										.1310					
150.000			.4950	.1700	.1520	.2440			.6590		.0220	-.0080	-.0200	-.0110	-.0250
157.000								.7510							
162.000									.7130						
165.000											-.0010	-.0060	-.0190	.0050	-.0120
169.000									.6430						
172.000							.6700								
180.000	.0000	.0000	.3420	.1270	.1130	.1200			.7800		-.0460	-.0590	-.0770	-.0800	-.1050
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0410							-.0740		-.0810					
40.000	.0150	.0370		.1810	.1490	.0840	.0610			-.0550					

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AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU8)

MACH (3) = 3.502 BETAT (1) = -8.720

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0300	-.0570	-.0430	-.0350	.0190	.0170	.0050		
90.000		-.0230	-.0460	-.0350	.0150	.0410	.0410	.0400		
105.000				.0200	.0440	.1090	.0730	.0420		
110.000									.0320	
120.000		-.0480	-.0530	.2470	.2080	.0630	.0550	.0440	.0380	
135.000				.1410	.1770	-.0330	-.0350	-.0370		
150.000		-.0410	-.0530	-.0130	.0090	-.0710	-.0580	-.0420		
165.000		-.0430		-.0020	.0260	-.0150	.0490	-.0020		
180.000		-.1030	-.1010	-.0850						

MACH (3) = 3.502 BETAT (2) = -6.530

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0270	-.0480	.0040			.0870		.0690	.0280	.0150	.0090	-.0280
20.000			.4390	.0530	-.0410	.0550			.0920		.0890				
40.000			.5380	.1190	.0620	.0950			.2190		.1220	.0860	.0190	-.0150	-.0130
55.000			.5640	.1660	.1160	.1210			.1300		.2210				
70.000			.6190	.1780	.1150	.1280			.1460		.1730	.1290	.0470	.0220	.0000
90.000		.0000	.6270	.1870	.1190	.1270			.1290		.1730	.1660	.0470	.0080	-.0130
120.000			.5600	.1890	.1490	.1760			.2010		.0940	.0000	.0000	-.0100	-.0330
142.000										.0970					
150.000			.4780	.1590	.1420	.1790			.6080		.0000	-.0270	-.0330	-.0230	-.0370
157.000								.7300							
162.000									.6860						
165.000											-.0180	-.0330	-.0310	-.0220	-.0210
169.000									.6360						
172.000							.6850								
180.000	.0000	.0000	.3490	.1300	.1180	.1330			.8440		-.0560	-.0670	-.0650	-.0750	-.0940

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0440							-.0740		-.0720
40.000	-.0130	.0410		.1580	.1090	.0660	.0370			-.0660
70.000		-.0480	-.0690	-.0570	-.0520	-.0040	-.0060	-.0160		
90.000		-.0410	-.0560	-.0480	-.0100	.0120	.0170	.0150		
105.000				.0010	.0130	.0600	.0430	.0140		
110.000									.0090	
120.000		-.0550	-.0580	.1820	.1630	.0270	.0330	.0210	.0140	
135.000				.1200	.1570	-.0410	-.0460	-.0440		
150.000		-.0490	-.0580	-.0210	.0040	-.0730	-.0590	-.0460		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB08)

MACH (3) = 3.502 BETAT (2) = -6.530

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0470		-.0240	.0120	-.0130	.0420	-.0070		
180.000		-.0940	-.0870	-.0650						

MACH (3) = 3.502 BETAT (3) = -4.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0400	.0130	-.0320			.0210		.0840	.0490	.0240	.0370	-.0140
20.000			.4770	.0640	.0110	-.0130			-.0060		.0970				
40.000			.5550	.1230	.0520	.0840			.0220		.1230	.0480	.0120	-.0150	-.0260
55.000			.5620	.1500	.1010	.0930			.1030		.1840				
70.000			.5620	.1440	.0880	.0890			.1050		.1340	.1020	.0280	.0050	-.0170
90.000		.0000	.5630	.1510	.0900	.0960			.0870		.1060	.0430	.0240	-.0030	-.0250
120.000			.5130	.1640	.1250	.1380			.1450		.0650	-.0210	-.0310	-.0160	-.0380
142.000										.0690					
150.000			.4540	.1450	.1310	.1620			.5570		-.0150	-.0390	-.0460	-.0380	-.0450
157.000								.7090							
162.000									.6470						
165.000											-.0330	-.0510	-.0430	-.0440	-.0350
169.000									.6290						
172.000							.7100								
180.000	.0000	.0000	.3510	.1340	.1190	.1410			.8190		-.0600	-.0700	-.0640	-.0620	-.0710

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0470							-.0690		-.0630
40.000	-.0180	.0250		.1180	.0690	.0320	.0140			-.0760
70.000		-.0570	-.0760	-.0670	-.0630	-.0240	-.0240	-.0350		
90.000		-.0520	-.0660	-.0630	-.0340	-.0100	-.0010	-.0090		
105.000				-.0230	-.0060	.0140	.0090	-.0070		
110.000									-.0100	
120.000		-.0590	-.0630	.1340	.1110	-.0040	-.0020	.0020	-.0020	
135.000				.0790	.1360	-.0460	-.0540	-.0430		
150.000		-.0520	-.0570	-.0130	.0070	-.0640	-.0550	-.0530		
165.000		-.0450		-.0130	.0150	.0130	.0220	-.0180		
180.000		-.0780	-.0730	-.0590						

AMES 87-767 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU8)

MACH (3) = 3.502 BETAT (4) = -2.140

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0560	.0110	-.0250			-.0260		.0860	.0810	.0590	.0500	-.0010
25.000			.4950	.0730	.0170	-.0360			-.0170		.0910				
40.000			.5620	.1170	.0550	.0270			-.0130		.1400	.0510	.0190	-.0020	-.0080
55.000			.5610	.1380	.0850	.0640			.0700		.1980				
70.000			.5190	.1220	.0710	.0610			.0730		.0770	.0630	.0240	-.0070	-.0280
90.000		.0000	.5080	.1190	.0650	.0720			.0620		.0780	.0060	.0160	-.0120	-.0360
120.000			.4690	.1390	.0980	.1110			.0970		.0510	-.0250	-.0450	-.0280	-.0450
142.000										.0490					
150.000			.4330	.1330	.1160	.1440			.5120		-.0150	-.0400	-.0560	-.0540	-.0490
157.000								.6910							
162.000									.6180						
165.000											-.0330	-.0510	-.0520	-.0560	-.0420
169.000									.6230						
172.000							.7340								
180.000	.0000	.0000	.3580	.1340	.1200	.1430			.8310		-.0550	-.0590	-.0640	-.0550	-.0580

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0490							-.0640		-.0640
40.000	-.0320	-.0320		.0490	.0200	.0010	-.0250			-.0840
70.000		-.0690	-.0840	-.0800	-.0710	-.0480	-.0470	-.0430		
90.000		-.0640	-.0780	-.0660	-.0480	-.0310	-.0300	-.0290		
105.000				-.0350	-.0320	-.0210	-.0220	-.0270		
110.000									-.0250	
120.000		-.0640	-.0880	.0550	.0630	-.0240	-.0220	-.0150	-.0190	
135.000				.0840	.1230	-.0490	-.0570	-.0420		
150.000		-.0570	-.0990	.0420	.0420	-.0590	-.0460	-.0290		
165.000		-.0510		-.0120	.0490	.0190	.0170	-.0150		
180.000		-.0550	-.0550	-.0450						

MACH (3) = 3.502 BETAT (5) = 2.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0490	.0080	-.0300			-.0110		.0800	.0670	.0510	.0440	-.0070
25.000			.4890	.0610	.0040	-.0300			-.0290		.0910				
40.000			.5050	.0830	.0220	-.0300			-.0240		.0620	.0420	.0260	.0020	-.0390
55.000			.4990	.0880	.0420	.0180			.0110		.0470				
70.000			.4250	.0710	.0250	.0230			.0300		.0080	-.0290	-.0240	-.0360	-.0510
90.000		.0000	.3950	.0540	.0230	.0300			.0170		.0210	-.0440	-.0600	-.0540	-.0530
120.000			.3790	.0640	.0560	.0590			.0380		.0030	-.0640	-.0700	-.0660	-.0480

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU8)

MACH (3) = 3.502 BETAT (5) = 2.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0480					
150.000			.3750	.1510	.0910	.1110			.4110		-.0410	-.0730	-.0760	-.0690	-.0610
157.000								.6390							
162.000									.5910						
165.000											-.0670	-.0800	-.0750	-.0650	-.0650
169.000									.6200						
172.000							.6620								
180.000	.0000	.0000	.3470	.1270	.1160	.1400			.8210		-.0730	-.0730	-.0640	-.0650	-.0650

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0525							-.0580		-.0660
40.000	-.0630	-.0750		-.0110	-.0420	-.0370	-.0670			-.0830
70.000		-.0840	-.0910	-.0860	-.0810	-.0720	-.0690	-.0680		
90.000		-.0760	-.0870	-.0700	-.0720	-.0590	-.0600	-.0580		
105.000				-.0470	-.0600	-.0570	-.0620	-.0600		
110.000									-.0560	
120.000		-.0630	-.0660	.0520	.0130	-.0600	-.0630	-.0610	-.0530	
135.000				.1520	.1240	-.0500	-.0600	-.0440		
150.000		-.0510	-.0510	.0400	.1020	-.0160	-.0140	-.0170		
165.000		-.0460		-.0140	.0840	.0640	.0320	.0020		
180.000		-.0590	-.0610	-.0500						

MACH (3) = 3.502 BETAT (6) = 4.460

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0400	.0110	-.0340			.0270		.0800	.0580	.0370	.0270	-.0190
20.000			.4280	.0480	.0060	-.0300			-.0220		.0800				
40.000			.4500	.0620	.0100	-.0340			-.0240		.0300	.0280	.0270	-.0090	-.0520
55.000			.4470	.0590	.0170	.0000			-.0100		-.0130				
70.000			.3680	.0400	.0040	.0060			.0140		-.0130	-.0400	-.0430	-.0390	-.0510
90.000		.0000	.3380	.0290	-.0010	.0090			-.0060		.0050	-.0480	-.0610	-.0500	-.0550
120.000			.3350	.0600	.0320	.0360			-.0060		-.0070	-.0670	-.0780	-.0740	-.0560
142.000										-.0070					
150.000			.3470	.0900	.0750	.0960			.3610		-.0400	-.0740	-.0790	-.0740	-.0740
157.000								.6120							
162.000									.5860						
165.000											-.0710	-.0770	-.0760	-.0690	-.0740
169.000									.6160						
172.000							.6260								

AMES 87-757 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU8)

MACH (3) = 3.502 BETAT (6) = 4.460

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	.0000	.0000	.3490	.1250	.1150	.1340			.8110		-.0800	-.0640	-.0680	-.0690	-.0780

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0530							-.0740		-.0690
40.000	-.0730	-.0780		-.0410	-.0460	-.0590	-.0810			-.0750
70.000		-.0660	-.0980	-.0880	-.0820	-.0720	-.0830	-.0650		
90.000		-.0770	-.0870	-.0750	-.0730	-.0540	-.0670	-.0640		
105.000				-.0450	-.0520	-.0630	-.0660	-.0680		
110.000									-.0640	
120.000		-.0560	-.0590	.0420	-.0050	-.0660	-.0660	-.0670	-.0620	
135.000				.1120	.1330	-.0510	-.0590	-.0360		
150.000		-.0500	-.0530	.0350	.1670	-.0170	-.0260	-.0230		
165.000		-.0610		-.0410	.0630	.0430	.0150	.0110		
180.000		-.0860	-.0810	-.0690						

MACH (3) = 3.502 BETAT (7) = 6.660

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0210	-.0190	-.0090			.0840		.0630	.0360	.0230	-.0070	-.0350
20.000			.3680	.0210	-.0190	-.0250			.0330		.0670				
40.000			.3720	.0250	-.0200	-.0310			-.0290		.0000	-.0190	-.0330	-.0550	-.0760
55.000			.3710	.0210	-.0090	-.0160			-.0180		-.0220				
70.000			.2880	.0030	-.0240	-.0090			-.0050		-.0230	-.0500	-.0520	-.0500	-.0620
90.000		.0000	.2740	-.0420	-.0270	-.0110			-.0290		-.0230	-.0580	-.0680	-.0670	-.0620
120.000			.2850	.0320	.0110	.0120			-.0330		-.0290	-.0760	-.0940	-.0850	-.0650
142.000										-.0250					
150.000			.3110	.0700	.0620	.0770			.3110		-.0500	-.0830	-.0900	-.0830	-.0740
157.000								.5790							
162.000									.5700						
165.000											-.0800	-.0830	-.0820	-.0780	-.0900
169.000									.5990						
172.000							.5750								
180.000	.0000	.0000	.3380	.1170	.1100	.1200			.7810		-.0610	-.0670	-.0770	-.0880	-.1060

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0510							-.0750		-.0760
40.000	-.0800	-.0780		-.0530	-.0540	-.0690	-.0770			-.0630

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB08)

MACH (3) = 3.502 BETAT (7) = 6.66

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0840	-.0940	-.0840	-.0810	-.0720	-.0770	-.0700		
90.000		-.0760	-.0820	-.0740	-.0700	-.0710	-.0710	-.0730		
105.000				-.0420	-.0610	-.0690	-.0690	-.0740		
110.000									-.0730	
120.000		-.0570	-.0670	-.0890	-.0490	-.0850	-.0720	-.0790	-.0730	
135.000				.2670	.1950	-.0420	-.0640	-.0630		
150.000		-.0780	-.0790	-.0300	.0390	-.0690	-.0550	-.0380		
165.000		-.0930		-.0640	.0030	-.0420	.0000	-.0520		
180.000		-.1040	-.0930	-.0720						

MACH (3) = 3.502 BETAT (8) = 8.86

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0090	-.0140	.0280			.1480		.0480	.0050	.0090	.0010	-.0420
20.000			.3100	.0020	-.0300	.0150			.0610		.0210				
40.000			.3040	-.0030	-.0410	-.0260			-.0430		-.0330	-.0710	-.0850	-.0860	-.0930
55.000			.3000	-.0120	-.0320	-.0280			-.0260		-.0260				
70.000			.2260	-.0260	-.0440	-.0290			-.0220		-.0350	-.0630	-.0720	-.0650	-.0650
90.000		.0000	.2170	-.0280	-.0470	-.0300			-.0470		-.0580	-.0860	-.0860	-.0680	-.0650
120.000			.2400	.0110	-.0110	-.0130			-.0530		-.0660	-.1010	-.0960	-.0900	-.0740
142.000										-.0400					
150.000			.2790	.0540	.0450	.0560			.2610		-.0750	-.1030	-.0950	-.0880	-.0850
157.000								.5190							
162.000									.5480						
165.000											-.1020	-.1020	-.0860	-.0940	-.1070
169.000									.5790						
172.000							.5280								
180.000	.0000	.0000	.3300	.1120	.1020	.1070			.7550		-.0690	-.0800	-.0890	-.0950	-.1170

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0400							-.0880		-.0910
40.000	-.0980	-.0840		-.0600	-.0740	-.0740	-.0870			-.0750
70.000		-.0880	-.0950	-.0850	-.0810	-.0710	-.0760	-.0700		
90.000		-.0750	-.0850	-.0750	-.0630	-.0600	-.0690	-.0730		
105.000				-.0480	-.0650	-.0730	-.0690	-.0820		
110.000									-.0760	
120.000		-.0810	-.0760	.0480	-.0020	-.0750	-.0860	-.0820	-.0730	
135.000				.1080	.0700	-.0590	-.0560	-.0520		
150.000		-.1070	-.1130	-.0910	-.0990	-.0840	-.0830	-.0840		

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB08)

MACH (3) = 3.502 BETAT (8) = 8.80

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.1170		-.0950	-.0830	-.0430	-.0500	-.0740		
180.000		-.1160	-.1110	-.0950						

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNBU9) (10 MAY 73)

AMES 87-7U7 IA9 O2A + S3 + T9 ORBITER FUSELAGE

REFERENCE DATA

SREF = 2.421U SQ.FT. XMRP = 28.53UU INCHES
LREF = 39.849U INCHES YMRP = .UUUU INCHES
BREF = 39.849U INCHES ZMRP = .UUUU INCHES
SCALE = .U3UU SCALE

PARAMETRIC DATA

ALPHAT = 6.UUU ORBINC = .5UU
RUDDER = .UUU ELEVON = .UUU
RUDFLR = .UUU

MACH (1) = 2.498 BETAT (1) = -8.41U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.UU75	.U188	.U339	.U6U2	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5121
PHI															
.UUU	1.2421	.9031	.4311	.U541	.U621	.1321			.U451		.U341	-.U131	-.U221	-.U431	-.U461
20.UUU			.5191	.U901	.U651	.U661			.U641		-.U051				
40.UUU			.6631	.1941	.1461	.1921			.1051		.U311	-.U221	-.U321	-.U191	.U901
55.UUU			.7021	.2451	.2081	.3611			.2601		.1601				
70.UUU			.6881	.2431	.1751	.3771			.2931		.2001	.U691	-.U181	-.U231	-.U661
90.UUU		1.U911	.6411	.2041	.1631	.3711			.3121		.2901	.U591	-.U231	-.U411	-.U321
120.UUU			.5441	.1801	.1581	.2251			.4771		.1631	.U141	-.U471	-.U771	-.U781
142.UUU										.1391					
150.UUU			.4431	.1211	.1241	.2241			.6291		-.U661	-.U421	-.U411	-.U541	-.U761
157.UUU								.6651							
162.UUU									.6351						
165.UUU											-.U621	.U081	.UUU1	-.U401	-.U791
169.UUU									.5281						
172.UUU							.5501								
180.UUU	1.2421	.8081	.2831	.U841	.U781	.1891			.6671		-.1291	-.1181	-.1651	-.1731	-.1611

X/LB	.5873	.6626	.7381	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.1111		-.U941
.UUU	-.U231									-.1241
40.UUU	.1681	.U971		.2311	.1701	.1311	.U251			
70.UUU		-.U271	-.U501	-.U481	-.U651	.U061	.U081	-.U311		
90.UUU		-.U251	-.U391	-.U301	.U661	.U061	.U211	-.U031		
105.UUU				.U931	.1361	.U971	.U161	-.U161		
115.UUU									-.U201	
120.UUU		-.U711	-.U781	.4211	.3141	.U561	.U081	-.U091	-.U161	
135.UUU				.U961	.1311	-.U971	-.1251	-.1111		
150.UUU		-.U841	-.U851	-.U341	-.U471	-.1391	-.1301	-.1201		
165.UUU		-.U711		-.U011	.U291	-.U411	.U681	-.U161		
180.UUU		-.1311	-.1261	-.U951						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU9)

MACH (1) = 2.490 BETAT (2) = -6.280

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2830	.9230	.4880	.0970	.0710	.1150			.1200		.0510	.0320	.0080	-.0490	-.0600
20.000			.5500	.1340	.1310	.0450			.0790		.0210				
40.000			.6530	.1990	.1880	.1340			.0650		.0200	-.0220	-.0400	-.0250	.0580
55.000			.6800	.2160	.1870	.2940			.2180		.1280				
70.000			.6480	.2180	.1350	.3180			.2480		.1800	.0380	-.0280	-.0520	-.0370
90.000		1.0500	.5860	.1630	.1210	.2560			.2730		.2470	.0330	-.0440	-.0600	-.0610
120.000			.5050	.1500	.1210	.1850			.3690		.1590	.0000	-.0580	-.0910	-.0880
142.000										.0780					
150.000			.4230	.1595	.1030	.1670			.6030		-.0310	-.0430	-.0540	-.0670	-.0900
157.000								.6830							
162.000									.6080						
165.000											-.0870	-.0250	-.0220	-.0550	-.0900
169.000									.5260						
172.000							.6140								
180.000	1.2830	.8170	.2830	.0840	.0760	.1410			.6890		-.1320	-.1290	-.1110	-.1610	-.1390

X/LB	.5873	.6626	.7530	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0430							-.1060		-.0800
40.000	.0790	.0610		.1880	.1320	.0950	.0040			-.1340
70.000		-.0590	-.0750	-.0680	-.0790	-.0130	-.0350	-.0500		
90.000		-.0510	-.0600	-.0530	.0370	.0060	.0010	-.0250		
105.000				.0570	.0990	.0620	-.0030	-.0360		
110.000									-.0380	
120.000		-.0870	-.0900	.3540	.2490	.0320	-.0120	-.0270	-.0330	
135.000				.0940	.1240	-.0910	-.1200	-.0980		
150.000		-.0930	-.0820	-.0330	-.0310	-.1240	-.1180	-.1140		
165.000		-.0910		-.0160	.0350	.0030	.0660	-.0190		
180.000		-.1250	-.1080	-.0840						

MACH (1) = 2.490 BETAT (3) = -4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3380	.9270	.4900	.1550	.0690	-.0230			.1940		.1110	.0210	.0220	-.0510	-.0860
20.000			.5430	.1050	.1300	-.0030			.1420		.0550				
40.000			.6120	.1510	.1870	.1000			.0880		.0310	-.0060	-.0200	-.0410	.0380
55.000			.6240	.1590	.1620	.2420			.1830		.1150				
70.000			.5940	.1590	.0980	.2640			.2130		.1540	.0220	-.0460	-.0660	-.0640
90.000		1.0270	.5390	.1190	.0870	.1520			.2500		.2100	.0140	-.0560	-.0750	-.0820
120.000			.4620	.1180	.0960	.1540			.2750		.1380	-.0200	-.0660	-.0910	-.0990

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB09)

MACH (1) = 2.498 BETAT (3) = -4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0330					
150.000			.3990	.0910	.0980	.1620			.5660		-.0540	-.0550	-.0740	-.0730	-.0970
157.000								.6680							
162.000									.5780						
165.000											-.1040	-.0740	-.0390	-.0610	-.0950
169.000									.5290						
172.000							.6150								
180.000	1.3360	.8290	.2840	.0860	.0830	.1310			.7120		-.1380	-.1350	-.1040	-.1360	-.1170
X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0750							-.0890		-.0640					
40.000	.0420	.0310		.1420	.0890	.0650	-.0260			-.1370					
70.000		-.0790	-.0880	-.0850	-.0880	-.0370	-.0260	-.0690							
90.000		-.0750	-.0780	-.0680	.0210	-.0130	-.0180	-.0410							
105.000				.0370	.0650	.0430	-.0220	-.0490							
110.000									-.0520						
120.000		-.0930	-.0900	.2720	.2140	.0060	-.0300	-.0410	-.0440						
135.000				.1250	.1490	-.0770	-.1050	-.0790							
150.000		-.0880	-.0790	-.0030	.0110	-.1030	-.0840	-.0670							
165.000		-.0860		.0030	.0540	.0250	.0410	-.0290							
180.000		-.0890	-.0880	-.0630											

MACH (1) = 2.498 BETAT (4) = -2.060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3350	.9260	.4600	.1040	.0930	-.0660			.2250		.1600	.0320	.0470	-.0540	-.1010
20.000			.4830	.1180	.1360	-.0690			.1700		.0690				
40.000			.5490	.1150	.1750	.0240			.1340		.0440	.0090	-.0060	-.0390	.0370
55.000			.5570	.1140	.0890	.1640			.1540		.0970				
70.000			.5300	.1130	.0250	.1110			.1850		.1370	.0090	-.0580	-.0760	-.0780
90.000		.9660	.4740	.0810	.0140	.0840			.1980		.1770	.0220	-.0580	-.0830	-.0930
120.000			.4210	.0930	.0340	.0840			.1940		.1120	-.0350	-.0760	-.0920	-.1050
142.000										-.0030					
150.000			.3810	.0860	.0520	.1070			.5250		-.0690	-.0820	-.0850	-.0780	-.0910
157.000								.6550							
162.000									.5490						
165.000											-.1140	-.1070	-.0640	-.0650	-.0810
169.000									.5340						
172.000							.6530								

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNBU9)

MACH (1) = 2.490 BETAT (4) = -2.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
180.000	1.3350	.8480	.2930	.0910	.0540	.1070			.7220		-.1390	-.1240	-.1140	-.0810	-.0740

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0680							-.0830		-.0650
40.000	.0260	.0120		.0840	.0510	.0240	-.0630			-.0970
70.000		-.0930	-.1000	-.0970	-.0840	-.0480	-.0610	-.0810		
90.000		-.0850	-.0840	-.0580	-.0450	-.0510	-.0440	-.0530		
105.000				.0300	.0420	.0110	-.0380	-.0640		
115.000									-.0650	
120.000		-.0850	-.0760	.1740	.1660	.0110	-.0390	-.0680	-.0530	
135.000				.1060	.1660	-.0760	-.0830	-.0490		
150.000		-.0790	-.0670	.0350	.0500	-.0620	-.0160	.0070		
165.000		-.0730		.0500	.0740	.0290	.0260	-.0310		
180.000		-.0770	-.0750	-.0690						

MACH (1) = 2.490 BETAT (5) = 2.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.3360	.9320	.4490	.0950	.0550	-.0210			.2230		.1570	.0420	.0410	-.0540	-.1020
20.000			.4540	.0930	.0560	-.0260			.2090		.1470				
40.000			.4710	.0950	.1160	-.0150			.1790		.0620	.0060	.0120	-.0730	-.0320
55.000			.4610	.0820	.0570	-.0030			.0390		.0820				
70.000			.4200	.0240	-.0610	.0270			.0460		.1250	-.0480	-.0680	-.0890	-.1030
90.000		.8840	.3680	.0110	-.0080	.0480			.0500		.1080	-.0160	-.0660	-.0940	-.1060
120.000			.3270	.0370	.0150	.0480			.0870		.0110	-.0940	-.0840	-.0970	-.0910
142.000										-.0540					
150.000			.3210	.0510	.0570	.1050			.4150		-.0960	-.1310	-.1190	-.0710	-.0550
157.000								.6240							
162.000									.4970						
165.000											-.1390	-.1440	-.1160	-.0650	-.0540
169.000									.5290						
172.000							.6880								
180.000	1.3360	.8440	.2910	.0600	.0850	.1350			.7150		-.1390	-.1270	-.1140	-.0830	-.0790

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0790							-.0790		-.0650
40.000	-.0650	.0020		-.0120	-.0100	-.0230	-.1080			-.0670

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU9)

MACH (1) = 2.498 BETAT (5) = 2.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0990	-.1060	-.1000	-.0720	-.0740	-.0910	-.0920		
90.000		-.0790	-.0840	-.0440	-.0490	-.0660	-.0890	-.0830		
105.000				-.0240	-.0220	-.0660	-.0710	-.0850		
110.000									-.0870	
120.000		-.0820	-.0690	.0510	.0430	-.0660	-.0640	-.0580	-.0840	
135.000				.2560	.1870	-.0650	-.0540	-.0240		
150.000		-.0750	-.0740	.0600	.1670	-.0310	-.0070	-.0160		
165.000		-.0670		.0410	.1450	.0850	.0440	-.0380		
180.000		-.0790	-.0790	-.0670						

MACH (1) = 2.498 BETAT (6) = 4.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3420	.9390	.4730	.0950	.0550	.0150			.1840		.0960	.0370	.0130	-.0480	-.0830
20.000			.4660	.0920	.0310	-.0030			.2060		.1020				
40.000			.4510	.0920	.0670	-.0260			.1210		.0490	-.0320	-.0310	-.0860	-.0520
55.000			.4210	.0330	.0220	-.0310			.0870		.0670				
70.000			.3660	-.0050	-.0320	-.0150			.0420		.1090	-.0250	-.0800	-.0930	-.1110
90.000		.8250	.3140	-.0170	-.0360	.0100			.0190		.0260	-.0290	-.0780	-.0970	-.1110
120.000			.2810	.0130	-.0190	.0170			.0320		-.0300	-.1240	-.0980	-.0950	-.0840
142.000										-.0780					
150.000			.2910	.0390	.0300	.0810			.0640		-.1200	-.1540	-.1280	-.0730	-.0540
157.000								.5730							
162.000									.0880						
165.000											-.1600	-.1580	-.1250	-.0770	-.0560
169.000									.0270						
172.000							.6220								
180.000	1.3420	.8360	.2880	.0810	.0730	.1170			.0990		-.1470	-.1450	-.1050	-.1370	-.1180

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0710							-.1030		-.0660
40.000	-.0180	.0720		-.0350	-.0230	-.0740	-.1430			-.0800
70.000		-.0990	-.1070	-.1040	-.0810	-.0960	-.1110	-.0980		
90.000		-.0810	-.0890	-.0610	-.0650	-.0760	-.0990	-.0900		
105.000				-.0230	-.0470	-.0740	-.0960	-.0910		
110.000									-.0810	
120.000		-.0840	-.0700	.0880	.0230	-.0760	-.0970	-.0640	-.0650	
135.000				.2730	.2070	-.0730	-.0690	-.0510		
150.000		-.0740	-.0770	.0700	.2180	.0000	-.0890	-.0250		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB09)

MACH (1) = 2.498 BETAT (6) = 4.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0720		-.0150	.1650	.0410	-.0690	-.0260		
180.000		-.0950	-.0910	-.0600						

MACH (1) = 2.498 BETAT (7) = 6.440

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3080	.9280	.4890	.0860	.0560	.1570			.1070		.0490	.0270	.0020	-.0500	-.0580
20.000			.4600	.0840	.0200	.0280			.1830		.0430				
40.000			.4200	.0830	.0280	-.0510			.1230		-.0030	-.0430	-.0590	-.1070	-.0750
55.000			.3610	.0240	.0080	-.0480			-.0190		.0400				
70.000			.3030	-.0320	-.0470	-.0270			-.0440		.0640	-.0310	-.0740	-.1050	-.1200
90.000		.7550	.2560	-.0480	-.0470	-.0070			.0460		.0150	-.0460	-.0790	-.1040	-.1140
120.000			.2390	-.0150	-.0330	-.0070			.0300		-.0480	-.1290	-.1140	-.0970	-.0820
142.000										-.0970					
150.000			.2600	.0190	.0240	.0510			.3080		-.1250	-.1570	-.1420	-.0840	-.0650
157.000								.4450							
162.000									.4720						
165.000											-.1610	-.1570	-.1330	-.1120	-.0790
169.000									.5090						
172.000							.5340								
180.000	1.3080	.8190	.2780	.0720	.0790	.1180			.6750		-.1350	-.1390	-.1240	-.1660	-.1380

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0410							-.1040		-.0840
40.000	-.0250	.0310		-.0140	-.0550	-.0830	-.1030			-.0880
70.000		-.0980	-.1090	-.1060	-.0860	-.0840	-.1120	-.1040		
90.000		-.0790	-.0920	-.0660	-.0740	-.0700	-.0880	-.0950		
105.000				-.0240	-.0630	-.0690	-.0850	-.0990		
110.000									-.0940	
120.000		-.0920	-.0810	.0500	.0050	-.0990	-.0990	-.0900	-.0810	
135.000				.3430	.2480	-.0990	-.0870	-.0740		
150.000		-.0850	-.0920	.0320	.1310	-.0120	-.0790	-.0470		
165.000		-.0880		-.0490	.1010	-.0070	-.0260	-.0490		
180.000		-.1200	-.1080	-.0870						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB09)

MACH (1) = 2.498 BETAT (8) = 8.570

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2350	.8830	.4020	.0380	.0730	.1300			.0390		.0230	-.0180	-.0310	-.0420	-.0450
20.000			.3780	.0330	.0480	.1310			.0770		.0160				
40.000			.3490	.0440	.0240	-.0200			.0530		-.0680	-.0860	-.1020	-.1240	-.1150
55.000			.3060	-.0240	-.0390	-.0500			-.0500		-.0480				
70.000			.2490	-.0640	-.0740	-.0320			-.0680		.0320	-.0480	-.0880	-.1130	-.1260
90.000		.6810	.2090	-.0710	-.0770	-.0340			-.0680		.0010	-.0640	-.0870	-.1150	-.1130
120.000			.2030	-.0380	-.0550	-.0510			-.0650		-.0850	-.1410	-.1280	-.0980	-.0830
142.000										-.1120					
150.000			.2330	.0080	.0120	.0470			.2530		-.1360	-.1690	-.1530	-.0980	-.0960
157.000								.4340							
162.000									.4580						
165.000											-.1750	-.1660	-.1440	-.1580	-.1320
169.000									.4980						
172.000							.4530								
180.000	1.2350	.8140	.2750	.0700	.0750	.1360			.6560		-.1340	-.1300	-.1760	-.1830	-.1670

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0310							-.1280		-.0970
40.000	-.0730	-.0150		-.0680	-.0460	-.1240	-.1270			-.0930
70.000		-.0980	-.1160	-.1140	-.0930	-.1030	-.1270	-.1060		
90.000		-.0840	-.0980	-.0750	-.0730	-.0910	-.1060	-.1020		
105.000				-.0260	-.0610	-.0950	-.1110	-.1060		
110.000									-.0990	
120.000		-.1030	-.0920	.0520	.0070	-.1250	-.1260	-.1050	-.0970	
135.000				.3470	.2450	-.1120	-.0960	-.0710		
150.000		-.1200	-.1270	-.0480	-.0730	-.1420	-.1280	-.1010		
165.000		-.1260		-.0760	.0040	-.0810	-.0810	-.0900		
180.000		-.1370	-.1300	-.1010						

MACH (2) = 2.999 BETAT (1) = -8.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2230	.7980	.3600	.0280	-.0420	.0570			.1010		.0110	.0160	-.0120	-.0340	-.0320
20.000			.4450	.0600	.0080	.1250			.0820		.0310				
40.000			.5710	.1530	.0930	.3030			.1780		.0810	.0200	-.0310	-.0280	.0330
55.000			.6270	.2140	.1620	.3930			.3040		.2070				
70.000			.6530	.2140	.1520	.1940			.3210		.2490	.1000	.0280	.0030	-.0050
90.000		1.0880	.6370	.2100	.1450	.1910			.2140		.3110	.1030	.0120	-.0110	-.0220
120.000			.5410	.1910	.1510	.1950			.2950		.1760	.0430	-.0030	-.0390	-.0620

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AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB09)

MACH (2) = 2.999 BETAT (1) = -8.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI										.1140					
142.000									.5960		-.0130	-.0250	-.0210	-.0280	-.0450
150.000			.4390	.1360	.1200	.1780									
157.000								.6650							
162.000									.6290						
165.000											-.0400	-.0260	.0000	-.0060	-.0430
169.000									.5450						
172.000							.5890								
180.000	1.2250	.8050	.2900	.0960	.0820	.0980			.6830		-.0870	-.0940	-.1070	-.1120	-.1280

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0380							-.1030		-.0900
40.000	.0430	.0740		.1930	.1570	.1230	.0410			-.0760
70.000		-.0320	-.0570	-.0440	-.0410	.0100	-.0060	-.0690		
90.000		-.0270	-.0430	-.0420	.0540	.0320	.0270	.0290		
105.000				.0370	.0860	.1180	.0440	.0190		
110.000									.0490	
120.000		-.0610	-.0630	.3250	.2350	.0760	.0320	.0240	.0120	
135.000				.1140	.1420	-.0580	-.0860	-.0760		
150.000		-.0600	-.0660	-.0330	-.0230	-.1100	-.1000	-.0650		
165.000		-.0590		-.0160	.0160	-.0440	.0320	-.0160		
180.000		-.1130	-.1070	-.0800						

MACH (2) = 2.999 BETAT (2) = -6.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.2570	.8490	.3890	.0360	.0170	-.0250			.1160		.0330	.0230	.0320	-.0170	-.0380
20.000			.4580	.0660	.0190	.0270			.1230		.0370				
40.000			.5640	.1400	.0880	.2680			.1490		.0640	.0250	-.0280	-.0380	.0070
55.000			.5870	.1410	.1330	.3080			.2610		.1770				
75.000			.5970	.1720	.1150	.1560			.3110		.2170	.0790	.0060	-.0140	-.0270
90.000		1.0470	.5830	.1700	.1070	.1490			.1820		.2430	.0810	.0010	-.0230	-.0420
120.000			.5070	.1620	.1230	.1600			.2250		.1160	.0160	-.0690	-.0500	-.0690
142.000										.0720					
150.000			.4230	.1250	.1090	.1580			.5640		-.0390	-.0430	-.0360	-.0400	-.0550
157.000								.6570							
162.000									.5990						
165.000											-.0550	-.0510	-.0330	-.0180	-.0490
169.000									.5420						
172.000							.5950								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNBU9)

MACH (2) = 2.999 BETAT (2) = -6.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
180.000	1.2570	.8240	.2970	.0970	.0850	.1100			.7000		-.0900	-.0990	-.0930	-.1090	-.1200

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0510							-.0910		-.0770
40.000	.0360	.0580		.1590	.1250	.0730	.0160			-.0910
70.000		-.0550	-.0750	-.0660	-.0550	-.0160	-.0280	-.0330		
90.000		-.0510	-.0640	-.0570	.0170	.0060	.0010	.0050		
105.000				.0120	.0390	.0680	.0190	.0000		
110.000									.0590	
120.000		-.0690	-.0730	.2240	.1840	.0660	.0080	.0040	-.0080	
135.000				.0980	.1290	-.0710	-.0850	-.0760		
150.000		-.0730	-.0760	-.0380	-.0220	-.1080	-.0970	-.0710		
165.000		-.0720		-.0240	.0090	-.0260	.0220	-.0260		
180.000		-.1060	-.0940	-.0770						

MACH (2) = 2.999 BETAT (3) = -4.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.2870	.8830	.4060	.0380	.0410	-.0340			.1470		.1080	.0450	.0580	-.0010	-.0470
20.000			.2580	.0570	.0410	-.0340			.1880		.0630				
40.000			.1040	.1250	.0660	.0570			.1470		.0680	.0210	-.0170	-.0270	-.0050
55.000			.5660	.1510	.0980	.1250			.2250		.1510				
70.000			.5500	.1410	.0830	.1140			.1240		.1880	.0600	-.0070	-.0260	-.0430
90.000		1.0080	.5300	.1320	.0760	.1150			.1220		.2080	.0660	-.0070	-.0310	-.0530
120.000			.4690	.1370	.1000	.1280			.1880		.0660	-.0090	-.0210	-.0530	-.0690
142.000										.0470					
150.000			.4080	.1130	.1020	.1420			.5210		-.0400	-.0580	-.0570	-.0510	-.0600
157.000								.6430							
162.000									.5760						
165.000											-.0660	-.0710	-.0580	-.0340	-.0520
169.000									.5440						
172.000							.6100								
180.000	1.2870	.8470	.3030	.1020	.0910	.1130			.7240		-.0940	-.1010	-.0880	-.0880	-.1030

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0700							-.0880		-.0690
40.000	.0280	.0300		.1300	.0940	.0370	-.0060			-.1030

AMES 87-757 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNBU9)

MACH (2) = 2.999 BETAT (3) = -4.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0750	-.0840	-.0860	-.0700	-.0350	-.0440	-.0470		
90.000		-.0670	-.0750	-.0710	-.0150	-.0110	-.0220	-.0180		
105.000				-.0110	.0460	-.0110	-.0050	-.0210		
110.000									.0310	
120.000		-.0770	-.0850	.1510	.1320	.0040	-.0110	-.0150	-.0220	
135.000				.0810	.1180	-.0790	-.0880	-.0710		
150.000		-.0780	-.0770	-.0250	-.0110	-.0990	-.0910	-.0750		
165.000		-.0730		-.0230	.0210	-.0480	.0070	-.0340		
180.000		-.0810	-.0810	-.0750						

MACH (2) = 2.999 BETAT (4) = -2.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3110	.8610	.4760	.1620	.0590	-.0310			.1460		.1550	.0870	.0990	.0110	-.0420
20.000			.4430	.1540	.0620	-.0330			.1020		.0930				
40.000			.5090	.1020	.0750	.0370			.1370		.0830	.0260	-.0030	-.0210	-.0170
55.000			.5190	.1190	.0730	.1260			.1390		.1270				
75.000			.4910	.1610	.0520	.0810			.0960		.1570	.0420	-.0200	-.0370	-.0550
90.000		.9580	.4770	.1000	.0460	.0810			.0740		.1530	.0380	-.0190	-.0420	-.0630
120.000			.4320	.1120	.0750	.0960			.1290		.0420	-.0410	-.0340	-.0540	-.0720
142.000										.1210					
150.000			.3880	.1040	.0910	.1280			.4830		-.0490	-.0720	-.0730	-.0580	-.0630
157.000								.6320							
162.000									.5550						
165.000											-.0730	-.0870	-.0740	-.0500	-.0540
180.000									.5500						
172.000							.6800								
180.000	1.3100	.8020	.3150	.1040	.0930	.1230			.7370		-.0970	-.0950	-.0860	-.0730	-.0680

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0780							-.0930		-.0590
40.000	-.0300	.0110		.0930	.0560	.0190	-.0470			-.1120
75.000		-.0840	-.0840	-.0910	-.0750	-.0570	-.0870	-.0630		
90.000		-.0790	-.0860	-.0710	-.0370	-.0380	-.0420	-.0380		
105.000				-.0240	-.0190	-.0380	-.0320	-.0380		
110.000									.0220	
120.000		-.0800	-.0810	.0770	.0880	-.0360	-.0330	-.0280	-.0350	
135.000				.0650	.1210	-.0780	-.0820	-.0510		
150.000		-.0720	-.0710	.0420	.0500	-.0740	-.0580	-.0220		

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB09)

MACH (2) = 2.999 BETAT (4) = -2.100

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0650		-.0630	.0470	-.0620	.0010	-.0270		
180.000		-.0620	-.0620	-.0600						

MACH (2) = 2.999 BETAT (5) = 2.210

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1353	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3080	.9350	.4240	.0450	.0510	-.0330			.1020		.1440	.1020	.0980	.0460	-.0510
20.000			.4390	.0430	.0430	-.0330			.0590		.1430				
40.000			.4800	.0430	.0390	-.0310			.0170		.0930	.0340	.0110	-.0210	-.0620
55.000			.4790	.0490	.0260	.0160			.0060		.0640				
70.000			.4250	.0510	.0050	.0290			.0290		.0280	.0190	-.0290	-.0550	-.0690
90.000		.8470	.3710	.0520	.0060	.0330			.0140		.0330	-.0420	-.0310	-.0560	-.0760
120.000			.3440	.0630	.0300	.0490			.0580		-.0030	-.0750	-.0810	-.0590	-.0730
142.000										-.0180					
150.000			.3360	.0760	.0660	.0960			.0890		-.0640	-.0940	-.0960	-.0790	-.0470
157.000								.5960							
162.000									.0190						
165.000											-.0930	-.1030	-.0920	-.0760	-.0430
169.000									.0450						
172.000							.6440								
180.000	1.3080	.8630	.3080	.1020	.0930	.1220			.0320		-.0990	-.0940	-.0860	-.0760	-.0680

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0710							-.0680		-.0560
40.000	-.0790	-.0110		.0120	-.0100	-.0320	-.0880			-.0700
70.000		-.0900	-.1030	-.0960	-.0780	-.0770	-.0880	-.0760		
90.000		-.0860	-.0920	-.0730	-.0670	-.0620	-.0700	-.0620		
105.000				-.0575	-.0600	-.0630	-.0620	-.0620		
115.000									-.0140	
120.000		-.0700	-.0780	.0090	-.0120	-.0620	-.0610	-.0430	-.0410	
135.000				.1890	.1270	-.0620	-.0740	-.0380		
150.000		-.0530	-.0610	.0360	.1130	-.0420	-.0280	-.0250		
165.000		-.0480		-.0030	.0960	.0500	.0220	-.0210		
180.000		-.0650	-.0640	-.0610						

AMES 87-757 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB09)

MACH (2) = 2.999 BETAT (6) = 4.380

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2790	.9110	.4080	.0410	.0370	-.0370			.1390		.0960	.0530	.0580	-.0070	-.0520
20.000			.4110	.0340	.0330	-.0380			.0930		.1140				
40.000			.4310	.0450	.0170	-.0360			.0140		.0620	.0170	.0030	-.0440	-.0830
55.000			.4170	.0400	-.0020	-.0250			-.0110		.0180				
70.000			.3690	.0210	-.0230	.0030			.0020		.0040	-.0130	-.0350	-.0630	-.0810
90.000		.7820	.3180	.0140	-.0210	.0070			-.0220		.0070	-.0610	-.0500	-.0610	-.0830
120.000			.2950	.0330	.0070	.0220			-.0070		-.0260	-.0900	-.0950	-.0780	-.0700
142.000										-.0410					
150.000			.3020	.0550	.0480	.0770			.0340		-.0740	-.1080	-.1060	-.0880	-.0490
157.000								.5670							
162.000									.5030						
165.000											-.1060	-.1150	-.1000	-.0850	-.0590
169.000									.5360						
172.000							.5800								
180.000	1.2790	.8500	.2970	.0910	.0850	.1070			.7110		-.0980	-.1000	-.0940	-.0920	-.1080

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0720							-.0940		-.0670
40.000	-.0780	-.0280		-.0100	-.0230	-.0540	-.0930			-.0620
70.000		-.1010	-.1010	-.0960	-.0640	-.0810	-.0910	-.0820		
90.000		-.0880	-.0910	-.0770	-.0770	-.0760	-.0740	-.0730		
105.000				-.0540	-.0720	-.0750	-.0700	-.0710		
115.000									-.0150	
121.000		-.0680	-.0730	.0330	-.0170	-.0740	-.0770	-.0580	-.0540	
135.000				.1300	.1420	-.0740	-.0740	-.0560		
150.000		-.0580	-.0630	.0380	.1630	-.0280	-.0510	-.0490		
165.000		-.0550		-.0360	.0860	.0320	-.0200	-.0110		
180.000		-.0690	-.0620	-.0750						

MACH (2) = 2.999 BETAT (7) = 6.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2980	.8810	.3820	.0270	.0250	-.0230			.1190		.0290	.0110	.0260	-.0200	-.0360
20.000			.3790	.0220	.0150	-.0450			.1050		.0700				
40.000			.3840	.0240	-.0040	-.0360			-.0020		.0350	-.0240	-.0330	-.0640	-.0920
55.000			.3640	.0150	-.0230	-.0390			-.0220		.0020				
70.000			.3110	-.0050	-.0430	-.0180			-.0210		.0020	-.0410	-.0450	-.0670	-.0860
90.000		.7180	.2670	-.0100	-.0440	-.0150			-.0420		-.0170	-.0720	-.0700	-.0660	-.0870
120.000			.2320	.0140	-.0170	-.0020			-.0150		-.0500	-.1020	-.1050	-.0870	-.0620

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AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB09)

MACH (2) = 2.999 BETAT (7) = 6.55

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
142.000										-.0540					
150.000			.2720	.0440	.0330	.0600			.2820		-.0860	-.1150	-.1130	-.0970	-.0560
157.000								.4940							
162.000									.4910						
165.000											-.1170	-.1150	-.1050	-.0990	-.0960
169.000									.5210						
172.000							.5120								
180.000	1.2520	.8350	.2930	.0690	.0600	.0940			.6890		-.0930	-.1010	-.1070	-.1170	-.1270

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0490							-.0850		-.0690
40.000	-.0620	-.0270		-.0120	-.0550	-.0490	-.0830			-.0710
70.000		-.0990	-.0980	-.0940	-.0830	-.0760	-.0840	-.0850		
90.000		-.0860	-.0940	-.0780	-.0710	-.0660	-.0760	-.0780		
105.000				-.0450	-.0600	-.0650	-.0760	-.0790		
110.000									-.0330	
120.000		-.0690	-.0800	.0040	-.0320	-.0890	-.0830	-.0730	-.0620	
130.000				.2270	.1960	-.0890	-.0730	-.0720		
150.000		-.0720	-.0780	.0140	.1130	-.0880	-.0740	-.0590		
165.000		-.0890		-.0560	.0520	-.0440	-.0360	-.0260		
180.000		-.1070	-.0970	-.0790						

MACH (2) = 2.999 BETAT (8) = 8.72

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	1.2190	.8110	.3600	.0170	.0010	.0470			.0960		.0090	.0130	-.0100	-.0350	-.0360
20.000			.3360	.0440	-.0240	-.0200			.0630		.0010				
40.000			.3270	.0000	-.0290	-.0440			.0460		-.0230	-.0620	-.0730	-.0940	-.1050
55.000			.3000	.0000	-.0450	-.0470			-.0270		-.0180				
70.000			.2470	-.0280	-.0580	-.0320			-.0250		.0010	-.0430	-.0560	-.0720	-.0880
90.000		.8410	.2110	-.0380	-.0590	-.0320			-.0410		-.0320	-.0720	-.0790	-.0680	-.0850
120.000			.2140	-.0480	-.0270	-.0270			-.0110		-.0690	-.1130	-.1130	-.0940	-.0570
142.000										-.0680					
150.000			.2430	.0360	.0250	.0190			.0480		-.0920	-.1230	-.1170	-.0970	-.0870
157.000								.4450							
162.000									.4770						
165.000											-.1240	-.1200	-.1090	-.1150	-.1300
169.000									.5040						
172.000							.4700								

AMES 67-7\7 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU9)

MACH (2) = 2.999 BETAT (0) = 8.72\

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.\\\\	.\\75	.\188	.\339	.\\82	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.32\\	.3953	.512\
PHI															
180.\\\	1.219\	.818\	.283\	.\85\	.\78\	.\92\			.\62\		-.\89\	-.1\\\	-.113\	-.119\	-.138\

X/LB	.5873	.6628	.738\	.7869	.8283	.8848	.9262	.9639	1.\\15	1.\392
PHI										
.\\\	-.\\8\							-.1\7\		-.\86\
45.\\\	-.1\1\	-.\51\		-.\41\	-.\84\	-.\91\	-.\91\			-.\78\
75.\\\		-.\94\	-.\99\	-.\96\	-.\87\	-.\91\	-.1\\\	-.\89\		
95.\\\		-.\85\	-.\87\	-.\8\	-.\68\	-.\91\	-.\96\	-.\85\		
105.\\\				-.\44\	-.\54\	-.\89\	-.\98\	-.\88\		
115.\\\									-.\56\	
120.\\\		-.\78\	-.\84\	.\\1\	-.\14\	-.\9\	-.1\7\	-.\86\	-.\76\	
135.\\\				.235\	.187\	-.\69\	-.\86\	-.\69\		
150.\\\		-.1\7\	-.111\	-.\68\	-.\77\	-.127\	-.112\	-.\77\		
165.\\\		-.119\		-.\84\	-.\48\	-.\9\	-.\78\	-.\74\		
180.\\\		-.1186	-.1115	-.\86\						

MACH (5) = 3.5\2 BETAT (1) = -8.71\

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.\\\\	.\\75	.\188	.\339	.\\82	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.32\\	.3953	.512\
PHI															
.\\\	.\\\\	.\\\\	.\\\\	.\2\\	-.\15\	.\22\			.151\		.\38\	-.\\5\	.\\8\	-.\12\	-.\5\\
20.\\\			.428\	.\56\	.\\\\	.\49\			.\89\		.\49\				
40.\\\			.544\	.139\	.\8\\	.119\			.236\		.111\	.\53\	-.\17\	-.\39\	.\11\
55.\\\			.571\	.196\	.147\	.176\			.33\\		.228\				
75.\\\			.6\\\	.25\\	.144\	.169\			.168\		.264\	.118\	.\39\	.\18\	-.\\1\
9\.\\\		.\\\\	.635\	.25\\	.136\	.169\			.18\\		.256\	.114\	.\39\	.\\5\	-.\16\
120.\\\			.538\	.187\	.146\	.178\			.221\		.111\	.\21\	.\15\	-.\26\	-.\49\
142.\\\										.1\4\					
15\.\\\			.433\	.133\	.\18\	.\62\			.575\		-.\\8\	-.\34\	-.\25\	-.\25\	-.\41\
157.\\\								.653\							
162.\\\									.625\						
165.\\\											-.\27\	-.\31\	-.\26\	-.\2\	-.\31\
169.\\\									.558\						
172.\\\							.6186								
180.\\\	.\\\\	.\\\\	.287\	.\93\	.\83\	.\92\			.666\		-.\7\	-.\82\	-.\9\	-.\85\	-.11\

X/LB	.5873	.6628	.738\	.7869	.8283	.8848	.9262	.9639	1.\\15	1.\392
PHI										
.\\\	-.\43\							-.\\8\		-.\88\
45.\\\	.\18\	.\97\		.178\	.1335	.\81\	.\5\\			-.\58\

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB09)

MACH (3) = 3.502 BETAT (1) = -8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.5628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0390	-.0620	-.0500	-.0420	.0110	.0040	-.0010		
90.000		-.0340	-.0470	-.0440	.0110	.0410	.0280	.0280		
105.000				.0420	.0400	.1060	.0620	.0320		
110.000									.0230	
120.000		-.0610	-.0660	.2350	.1970	.0750	.0450	.0320	.0230	
135.000				.0900	.1370	-.0430	-.0510	-.0530		
150.000		-.0590	-.0630	-.0320	-.0190	-.0780	-.0700	-.0570		
165.000		-.0590		-.0250	-.0010	-.0350	.0260	-.0160		
180.000		-.1090	-.1020	-.0850						

MACH (3) = 3.502 BETAT (2) = -8.510

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1938	.2259	.2711	.3260	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0290	-.0050	-.0330			.0820		.0470	.0080	-.0090	.0050	-.0390
20.000			.4880	.0590	.0020	.0060			.1310		.0620				
40.000			.5670	.1380	.0650	.0620			.2160		.0890	.0520	-.0030	-.0420	-.0150
55.000			.5740	.1730	.1210	.1240			.3080		.1880				
70.000			.5830	.1660	.1530	.1290			.1410		.2390	.0980	.0240	.0010	-.0210
90.000		.0000	.5760	.1650	.1050	.1240			.1370		.1950	.0980	.0270	-.0080	-.0310
120.000			.4990	.1580	.1240	.1430			.1630		.0810	-.0050	.0010	-.0310	-.0550
142.000										.0810					
150.000			.4150	.1220	.1090	.1450			.5310		-.0130	-.0380	-.0420	-.0360	-.0500
157.000								.6400							
162.000									.5880						
165.000											-.0320	-.0460	-.0410	-.0260	-.0340
169.000									.5480						
172.000							.6260								
180.000	.0000	.0000	.2940	.0950	.0850	.0970			.6990		-.0660	-.0780	-.0790	-.0850	-.1030

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0480							-.0710		-.0710
40.000	-.0080	.0210		.1530	.1110	.0520	.0330			-.0650
70.000		-.0530	-.0740	-.0600	-.0560	-.0040	-.0150	-.0230		
90.000		-.0540	-.0630	-.0550	-.0140	.0090	.0080	.0040		
105.000				-.0150	.0110	.0620	.0330	.0110		
110.000									.0020	
120.000		-.0700	-.0730	.1630	.1480	.0270	.0240	.0090	.0070	
135.000				.0790	.1190	-.0510	-.0490	-.0540		
150.000		-.0640	-.0730	-.0370	-.0210	-.0810	-.0690	-.0570		

AMES 87-757 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU9)

MACH (3) = 3.502 BETAT (2) = -6.510

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0680		-.0320	-.0080	-.0320	.0170	-.0280		
180.000		-.1000	-.0950	-.0720						

MACH (3) = 3.502 BETAT (3) = -4.320

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1906	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	.0430	.0160	-.0350			.0510		.0830	.0250	.0560	.0190	-.0260
25.000			.4810	.0660	.0210	-.0390			.0130		.0740				
40.000			.5780	.1280	.0560	.0220			.1660		.0850	.0290	-.0150	-.0270	-.0300
55.000			.5770	.1600	.1160	.0880			.1060		.1610				
70.000			.5410	.1440	.0880	.0920			.1010		.1150	.0690	.0240	-.0150	-.0350
90.000		.0000	.5240	.1340	.0810	.0900			.0920		.1070	.0470	.0050	-.0210	-.0420
125.000			.4630	.1360	.1020	.1170			.1110		.0430	-.0350	-.0360	-.0350	-.0500
142.000										.0550					
150.000			.3970	.1130	.1000	.1290			.4870		-.0340	-.0560	-.0560	-.0480	-.0580
157.000								.6210							
182.000									.5610						
165.000											-.0530	-.0680	-.0550	-.0480	-.0440
189.000									.5430						
172.000							.6280								
180.000	.0000	.0000	.3010	.1000	.0890	.1060			.7120		-.0780	-.0870	-.0760	-.0860	-.0870

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0990							-.0750		-.0570
40.000	-.0075	.0110		.1180	.0670	.0250	.0130			-.0760
70.000		-.0680	-.0840	-.0730	-.0710	-.0320	-.0340	-.0370		
90.000		-.0680	-.0760	-.0690	-.0360	-.0120	-.0150	-.0190		
105.000				-.0370	-.0160	.0210	.0050	-.0150		
110.000									-.0180	
120.000		-.0730	-.0780	.0980	.0940	-.0080	.0030	-.0100	-.0120	
135.000				.0560	.0850	-.0610	-.0670	-.0570		
150.000		-.0670	-.0740	-.0450	-.0240	-.0780	-.0710	-.0690		
165.000		-.0670		-.0420	-.0150	-.0130	.0030	-.0330		
180.000		-.0850	-.0810	-.0690						

AMES 87-757 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNBU9)

MACH (3) = 3.502 BETAT (4) = -2.13U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0590	-.0420	-.0400			-.0130		.1050	.0930	.0240	.0260	-.0200
20.000			.4970	.0790	.0110	-.0430			-.0180		.0730				
40.000			.5710	.1200	.0520	.0040			-.0010		.0860	.0230	-.0150	-.0160	-.0180
55.000			.5730	.1360	.0820	.0570			.0540		.1560				
70.000			.5190	.1260	.0640	.0500			.0690		.0830	.0510	-.0090	-.0240	-.0440
90.000		.0000	.4710	.1050	.0590	.0580			.0600		.0550	.0060	-.0060	-.0290	-.0540
120.000			.4190	.1110	.0780	.0880			.0730		.0230	-.0490	-.0470	-.0380	-.0620
142.000										.0320					
150.000			.3750	.1020	.0880	.1120			.4430		-.0420	-.0640	-.0630	-.0610	-.0630
157.000								.5990							
162.000									.5350						
165.000											-.0590	-.0760	-.0640	-.0610	-.0530
169.000									.5420						
172.000							.6290								
180.000	.0000	.0000	.3030	.1000	.0890	.1080			.7290		-.0800	-.0850	-.0720	-.0670	-.0670

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0590							-.0700		-.0510
40.000	-.0410	-.0250		.0670	.0240	.0020	-.0260			-.0890
70.000		-.0790	-.0920	-.0860	-.0780	-.0470	-.0530	-.0510		
90.000		-.0750	-.0890	-.0790	-.0530	-.0350	-.0380	-.0360		
105.000				-.0480	-.0370	-.0130	-.0240	-.0320		
110.000									-.0340	
120.000		-.0780	-.0840	.0440	.0480	-.0270	-.0210	-.0240	-.0290	
135.000				.0350	.0770	-.0610	-.0640	-.0470		
150.000		-.0690	-.0730	-.0180	.0420	-.0580	-.0560	-.0440		
165.000		-.0630		-.0270	.0160	-.0480	-.0060	-.0280		
180.000		-.0680	-.0630	-.0580						

MACH (3) = 3.502 BETAT (5) = 2.26U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0590	.0000	-.0390			-.0100		.1060	.0960	.0290	.0280	-.0180
20.000			.4760	.0720	-.0010	-.0390			-.0280		.1160				
40.000			.5090	.0940	.0260	-.0440			-.0240		.0670	.0190	.0160	.0040	-.0360
55.000			.5070	.0990	.0410	.0020			-.0010		.0140				
70.000			.4340	.0680	.0200	.0120			.0220		.0000	-.0340	-.0260	-.0440	-.0560
90.000		.0000	.3740	.0570	.0190	.0240			.0150		.0140	-.0460	-.0600	-.0480	-.0590
120.000			.3380	.0670	.0480	.0450			.0230		-.0090	-.0670	-.0710	-.0660	-.0610

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB09)

MACH (3) = 3.502 BETAT (5) = 2.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
142.000										-.0040					
150.000			.3310	.0790	.0690	.0840			.3540		-.0510	-.0790	-.0780	-.0720	-.0660
157.000								.5570							
162.000									.5140						
165.000											-.0760	-.0850	-.0760	-.0690	-.0630
169.000									.5450						
172.000							.5750								
180.000	.0000	.0000	.3025	.0990	.0900	.1080			.7230		-.0790	-.0810	-.0680	-.0670	-.0670

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0590							-.0540		-.0500
40.000	-.0630	-.0530		-.0620	-.0330	-.0300	-.0580			-.0750
70.000		-.0830	-.0940	-.0840	-.0760	-.0680	-.0740	-.0650		
90.000		-.0810	-.0890	-.0710	-.0760	-.0540	-.0590	-.0580		
105.000				-.0520	-.0580	-.0530	-.0590	-.0550		
110.000									-.0520	
120.000		-.0690	-.0710	-.0420	-.0100	-.0600	-.0590	-.0480	-.0420	
135.000				.1540	.0880	-.0560	-.0580	-.0490		
150.000		-.0540	-.0570	.0160	.0740	-.0250	-.0250	-.0250		
165.000		-.0500		-.0190	.0720	.0390	.0210	-.0130		
180.000		-.0640	-.0640	-.0520						

MACH (3) = 3.502 BETAT (6) = 4.470

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	.0000	.0000	.0000	.0470	.0170	-.0360			.0550		.0820	.0390	.0660	.0190	-.0270
20.000			.4340	.0550	.0100	-.0370			-.0210		.0140				
40.000			.4510	.0650	.0130	-.0350			-.0240		.0490	.0170	.0040	-.0190	-.0570
55.000			.4500	.0590	.0170	-.0180			-.0130		-.0070				
70.000			.3710	.0430	-.0040	-.0240			.0010		-.0150	-.0340	-.0400	-.0480	-.0610
90.000		.0000	.3170	.0280	-.0020	.0030			-.0050		.0010	-.0490	-.0600	-.0470	-.0640
120.000			.2960	.0450	.0190	.0230			-.0090		-.0140	-.0660	-.0800	-.0750	-.0550
142.000										-.0160					
150.000			.3020	.0640	.0550	.0690			.3070		-.0480	-.0780	-.0850	-.0760	-.0670
157.000								.5340							
162.000									.5110						
165.000											-.0760	-.0810	-.0820	-.0730	-.0710
169.000									.5370						
172.000							.5380								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB09)

MACH (3) = 3.502 BETAT (6) = 4.470

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1959	.2259	.2711	.3200	.3953	.5120
PHI															
19.000	.0000	.0000	.2990	.0960	.0880	.1000			.7070		-.0680	-.0730	-.0760	-.0780	-.0910

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0580							-.0710		-.0620
40.000	-.0775	-.0610		-.0300	-.0290	-.0550	-.0790			-.0700
70.000		-.0880	-.0960	-.0840	-.0770	-.0770	-.0790	-.0700		
90.000		-.0820	-.0890	-.0740	-.0770	-.0620	-.0660	-.0680		
105.000				-.0580	-.0650	-.0730	-.0670	-.0700		
111.000									-.0630	
120.000		-.0640	-.0710	.0320	-.0140	-.0730	-.0660	-.0700	-.0580	
135.000				.0740	.0930	-.0550	-.0650	-.0570		
150.000		-.0580	-.0660	.0170	.1310	-.0240	-.0430	-.0450		
165.000		-.0620		-.0400	.0540	.0190	-.0230	-.0380		
180.000		-.0960	-.0810	-.0650						

MACH (3) = 3.502 BETAT (7) = 6.670

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0310	-.0060	-.0360			.0810		.0400	-.0090	-.0240	.0020	-.0420
20.000			.3870	.0300	-.0110	-.0380			.0280		.0630				
40.000			.3940	.0350	-.0110	-.0370			-.0320		.0270	-.0330	-.0470	-.0530	-.0810
55.000			.3370	.0280	-.0100	-.0350			-.0260		-.0170				
70.000			.2960	.0150	-.0240	-.0200			-.0140		-.0310	-.0610	-.0690	-.0600	-.0730
90.000		.0000	.2540	-.0050	-.0260	-.0160			-.0270		-.0460	-.0790	-.0850	-.0610	-.0730
120.000			.2480	.0180	-.0010	-.0020			-.0370		-.0520	-.0970	-.0920	-.0850	-.0670
142.000										-.0310					
150.000			.2670	.0470	.0390	.0510			.2570		-.0770	-.1060	-.0940	-.0870	-.0760
157.000								.4990							
162.000									.4960						
165.000											-.1060	-.1070	-.0890	-.0850	-.0960
169.000									.5160						
172.000							.4940								
180.000	.0000	.0000	.2890	.0890	.0620	.0850			.6730		-.0860	-.0940	-.0880	-.0940	-.1140

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0510							-.0780		-.0720
40.000										-.0640

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB09)

MACH (3) = 3.502 BETAT (7) = 6.670

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0930	-.1010	-.0930	-.0890	-.0800	-.0810	-.0730		
90.000		-.0850	-.0950	-.0860	-.0810	-.0780	-.0780	-.0790		
105.000				-.0670	-.0700	-.0780	-.0770	-.0800		
110.000									-.0790	
120.000		-.0880	-.0800	-.0110	-.0450	-.0760	-.0800	-.0850	-.0760	
135.000				.2000	.1580	-.0590	-.0710	-.0640		
150.000		-.0800	-.0850	-.0310	.0170	-.0830	-.0770	-.0510		
165.000		-.0940		-.0630	-.0680	-.0670	-.0410	-.0440		
180.000		-.1070	-.1060	-.0810						

MACH (3) = 3.502 BETAT (8) = 8.880

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0160	-.0190	.0150			.1370		.0300	-.0110	.0420	-.0160	-.0480
20.000			.3250	.0060	-.0350	-.0080			.0650		.0020				
40.000			.3150	.0030	-.0410	-.0310			-.0540		-.0240	-.0680	-.0800	-.0840	-.0960
55.000			.3110	-.0070	-.0320	-.0380			-.0370		-.0290				
70.000			.2250	-.0230	-.0430	-.0330			-.0320		-.0390	-.0640	-.0710	-.0660	-.0750
90.000		.0000	.1970	-.0320	-.0460	-.0330			-.0490		-.0590	-.0870	-.0860	-.0760	-.0740
120.000			.2040	-.0440	-.0200	-.0220			-.0650		-.0720	-.1050	-.0980	-.0930	-.0730
142.000										-.0510					
150.000			.2350	.0290	.0270	.0330			.2160		-.0850	-.1080	-.1040	-.0940	-.0910
157.000								.4500							
162.000									.4700						
165.000											-.1080	-.1090	-.0950	-.1010	-.1110
169.000									.4920						
172.000							.4580								
180.000	.0000	.0000	.2940	.0860	.0770	.0840			.6480		-.0790	-.0900	-.0980	-.0980	-.1210

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0430							-.0900		-.0890
40.000	-.1060	-.0740		-.0580	-.0710	-.0770	-.0860			-.0740
70.000		-.0940	-.1030	-.0920	-.0860	-.0770	-.0820	-.0710		
90.000		-.0840	-.0930	-.0850	-.0750	-.0770	-.0770	-.0790		
105.000				-.0590	-.0700	-.0790	-.0750	-.0850		
110.000									-.0820	
120.000		-.0710	-.0840	.0050	-.0320	-.0880	-.0890	-.0870	-.0780	
135.000				.1090	.0690	-.0620	-.0750	-.0620		
150.000		-.1080	-.1130	-.0880	-.0990	-.0970	-.0910	-.0860		

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNBU9)

AMES 87-707 IA9 OEA + 33 + T9 ORBITER FUSELAGE

MACH (3) = 3.502 BETAT (8) = 8.880

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

Y/LB	.5873	.6825	.7380	.7959	.8483	.8848	.9262	.9635	1.0015	1.0392
PHI										
165.000		-.1210		-.0950	.0810	-.0740	-.0710	-.0750		
180.000		-.1190	-.1100	-.0880						

AMES 87-757 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB1D) (15 MAY 73)

REFERENCE DATA

SREF = 2.421D SQ.FT. XMRP = 28.53DD INCHES
LREF = 39.849D INCHES YMRP = .DDDD INCHES
BREF = 39.849D INCHES ZMRP = .DDDD INCHES
SCALE = .D35D SCALE

PARAMETRIC DATA

ALPHAT = 8.DDD ORBINC = .5DD
RUDDER = .DDD ELEVON = .DDD
RUDFLR = .DDD

MACH (1) = 2.49D BETAT (1) = -8.38D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.DDDD	.DD75	.D188	.D339	.D6D2	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3259	.3953	.5129
PHI															
.DDD	1.282D	898D	.429D	.D54D	.D41D	.D66D			.D22D		.D25D	-.D24D	-.D32D	-.D41D	-.D33D
20.DDD			.515D	.D93D	.156D	.D32D			.D13D		-.D21D				
40.DDD			.659D	.185D	.172D	.159D			.D71D		-.D07D	-.D46D	-.D56D	-.D18D	.D97D
55.DDD			.712D	.185D	.207D	.327D			.231D		.134D				
70.DDD			.711D	.212D	.168D	.346D			.256D		.161D	.D56D	-.D21D	-.D28D	-.D05D
90.DDD		1.1DDD	.622D	.211D	.155D	.331D			.263D		.273D	.D46D	-.D39D	-.D66D	-.D36D
120.DDD			.494D	.153D	.135D	.213D			.543D		.119D	-.D23D	-.D63D	-.D96D	-.D98D
142.DDD										.151D					
150.DDD			.388D	.D93D	.D93D	.214D			.567D		-.D24D	-.D65D	-.D67D	-.D76D	-.D92D
157.DDD								.589D							
162.DDD									.583D						
165.DDD											-.D49D	-.D81D	-.D19D	-.D56D	-.1DDD
169.DDD									.[illegible]2D						
172.DDD							.438D								
180.DDD	1.282D	.734D	.238D	.D54D	.D48D	.145D			.59ED		-.136D	-.125D	-.17DD	-.179D	-.159D

X/LB	.5873	.6626	.738D	.7869	.8283	.8848	.9262	.9639	1.DD15	1.D392
PHI										
.DDD	-.D23D							-.D96D		-.D69D
40.DDD	.116D	.D79D		.228D	.165D	.148D	.D13D			-.D28D
75.DDD		-.D28D	-.D54D	-.D53D	-.D7DD	-.D83D	-.D28D	-.D39D		
90.DDD		-.D25D	-.D44D	-.D39D	.D52D	.D89D	.D1DD	-.D49D		
105.DDD				.D72D	.122D	.D66D	.D48D	-.D24D		
115.DDD									-.D32D	
125.DDD		-.D87D	-.D9DD	.445D	.299D	.D68D	.D11D	-.D2ED	-.D27D	
135.DDD				.D6ED	.1D7D	-.1D1D	-.137D	-.126D		
150.DDD		-.D95D	-.D91D	-.D46D	-.D72D	-.153D	-.141D	-.135D		
165.DDD		-.D78D		-.D18D	.D1DD	-.D6ED	.D38D	-.D38D		
180.DDD		-.129D	-.129D	-.11ED						

AMES 87-707 IA9 C8A + S3 + T9 ORBITER FUSELAGE (RBNB10)

MACH (1) = 2.498 BETAT (2) = -6.27

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3530	.9240	.4940	.1410	.0040	.1440			.0910		.0550	.0130	-.0020	-.0510	-.0610
2.000			.5450	.1440	.0870	.0470			.0370		-.0030				
4.000			.5430	.1920	.2010	.1340			.0530		-.0020	-.0470	-.0520	-.0090	.0510
55.000			.6720	.2170	.1900	.2780			.1960		.1050				
7.000			.6590	.1910	.1310	.2980			.2230		.1410	.0290	-.0390	-.0550	-.0320
9.000		1.0710	.5320	.1540	.1150	.3020			.2420		.2350	.0220	-.0570	-.0750	-.0600
120.000			.4530	.1540	.1090	.1860			.3860		.1130	-.0320	-.0750	-.1540	-.1030
142.000										.0690					
150.000			.3750	.0820	.0840	.1730			.5340		-.0290	-.0610	-.0690	-.0800	-.1020
157.000								.5650							
162.000									.5460						
165.000											-.0880	-.0240	-.0360	-.0670	-.1020
169.000									.4690						
172.000							.5110								
180.000	1.3030	.7510	.2430	.0580	.0560	.1230			.6200		-.1410	-.1330	-.1470	-.1700	-.1370

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0440							-.0900		-.0690
40.000	.0820	.0580		.1820	.1300	.1090	-.0130			-.1300
70.000		-.0560	-.0750	-.0750	-.0840	-.0160	-.0110	-.0540		
90.000		-.0520	-.0620	-.0550	.0290	-.0010	-.0420	-.0270		
105.000				.0440	.0910	.0790	-.0040	-.0380		
110.000									-.0480	
120.000		-.0980	-.1010	.0790	.2660	.0340	-.0140	-.0330	-.0420	
135.000				.0650	.0920	-.1140	-.1350	-.1100		
150.000		-.1030	-.1010	-.0430	-.0540	-.1360	-.1380	-.1390		
165.000		-.0950		-.0210	.0110	-.0150	.0370	-.0320		
180.000		-.1210	-.1100	-.0940						

MACH (1) = 2.498 BETAT (3) = -4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3340	.9590	.5240	.1480	-.0050	.0830			.1490		.0960	.0440	.0140	-.0570	-.0810
20.000			.5800	.1640	.0590	.0730			.1910		.0500				
40.000			.6220	.1870	.1960	.1140			.0580		.0050	-.0280	-.0310	-.0170	-.0020
55.000			.6280	.1820	.1730	.2310			.1640		.0830				
70.000			.6020	.1490	.1510	.2580			.1930		.1190	.0070	-.0570	-.0770	-.0640
90.000		1.0340	.5360	.1170	.0810	.1970			.2070		.1950	.0640	-.0700	-.0880	-.0880
120.000			.4270	.1160	.0830	.1360			.2870		.1190	-.0260	-.0810	-.1110	-.1130

AMES 87-707 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (1) = 2.498 BETAT (3) = -4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0338	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
142.000										.0250					
150.000			.3570	.0720	.0750	.1330			.5580		-.0510	-.0610	-.0810	-.0900	-.1080
157.000								.5870							
162.000									.5210						
165.000											-.1090	-.0560	-.0470	-.0770	-.1040
169.000									.4750						
172.000							.5260								
180.000	1.3340	.7870	.2480	.0810	.0590	.1160			.6360		-.1440	-.1400	-.1060	-.1510	-.1140

X/LB	.3873	.6428	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1680							-.0720		-.0560
40.000	.1480	.0520		.1530	.0980	.0840	-.0190			-.1250
75.000		-.0780	-.0920	-.0660	-.0980	-.0350	-.0550	-.0790		
90.000		-.1680	-.1810	-.0730	.1060	-.0200	-.0240	-.0450		
115.000				.0280	.0590	.0510	-.0230	-.0550		
130.000									-.0600	
125.000		-.1010	-.1080	.3000	.2220	.0120	-.0300	-.0490	-.0540	
135.000				.1080	.1190	-.0750	-.1180	-.0970		
150.000		-.0910	-.0830	-.0170	-.0130	-.1120	-.1030	-.1000		
165.000		-.0910		-.0110	.0330	.0170	.0320	-.0410		
180.000		-.0930	-.0690	-.0670						

MACH (1) = 2.498 BETAT (4) = -2.060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.3080	.9790	.5140	.1470	-.0080	.0350			.1960		.1000	.0710	.0200	-.0630	-.1060
20.000			.5390	.1615	.0360	.0330			.1380		.0870				
40.000			.5880	.1640	.1610	.1030			.0920		.0330	-.0090	-.0220	-.0510	-.0260
55.000			.5850	.1440	.1470	.1820			.1420		.0700				
75.000			.5500	.1120	.0670	.1510			.1670		.1060	-.0110	-.0690	-.0900	-.0820
90.000		.9980	.4870	.0820	.0480	.1120			.1910		.1580	-.0170	-.0810	-.0970	-.1010
120.000			.3840	.0810	.0570	.1040			.1720		.0930	-.0470	-.0870	-.1150	-.1180
142.000										-.0070					
150.000			.3300	.0580	.0640	.1150			.4750		-.0770	-.0830	-.0970	-.0940	-.1020
157.000								.6020							
162.000									.4900						
165.000											-.1240	-.1050	-.0690	-.0800	-.0920
169.000									.4710						
172.000							.6040								

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB15)

MACH (1) = 2.498 BETAT (4) = -2.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3660	.7750	.2470	.0630	.0620	.1050			.6460		-.1470	-.1350	-.1180	-.0880	-.0860

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0370							-.0600		-.0470
40.000	.0280	.0230		.0850	.0650	.0400	-.0510			-.0850
70.000		-.0940	-.1040	-.1000	-.0990	-.0450	-.0710	-.0880		
90.000		-.0870	-.0950	-.0780	-.0130	-.0290	-.0380	-.0580		
105.000				.0220	.0460	-.0290	-.0360	-.0660		
110.000									-.0710	
120.000		-.0930	-.0880	.2220	.1900	-.0130	-.0420	-.0580	-.0620	
135.000				.1050	.1520	-.0830	-.1000	-.0750		
150.000		-.0850	-.0740	.0130	.0440	-.0870	-.0530	.0050		
165.000		-.0820		.0250	.0540	.0100	.0180	-.0430		
180.000		-.0890	-.0830	-.0680						

MACH (1) = 2.498 BETAT (5) = 2.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3660	.9760	.5110	.1480	.1420	.0460			.1890		.0910	.0750	.0180	-.0590	-.0990
20.000			.5090	.1490	-.0650	.0410			.1840		.0850				
40.000			.5120	.1250	.0680	.0150			.1620		.0500	-.0210	-.0160	-.0900	-.0250
55.000			.4870	.0710	.0790	.0060			.0820		.0610				
70.000			.4330	.0230	.0050	.0130			.0440		.0120	-.0230	-.0810	-.0990	-.1100
90.000		.6900	.3700	.0110	-.0690	.0420			.0330		.0070	-.0270	-.0840	-.1070	-.1200
125.000			.2970	.0130	.0030	.0370			.0820		.0010	-.0810	-.0910	-.1100	-.1120
142.000										-.0630					
150.000			.2770	.0120	.0370	.0880			.0780		-.1040	-.1340	-.1170	-.0800	-.0710
157.000								.5810							
162.000									.0390						
165.000											-.1470	-.1420	-.1180	-.0650	-.0670
169.000									.0670						
172.000							.6430								
180.000	1.3680	.7810	.2440	.0520	.0610	.1070			.0360		-.1460	-.1360	-.1160	-.0910	-.0880

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0350							-.0550		-.0520
40.000	-.0620	.1030		.0310	-.0110	-.0220	-.1000			-.0630

AMES 87-757 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB1U)

MACH (1) = 2.490 BETAT (5) = 2.18U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6628	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
75.000		-.1050	-.1180	-.1110	-.0780	-.0780	-.1030	-.1010		
90.000		-.0830	-.0900	-.0460	-.0420	-.0780	-.0780	-.0890		
105.000				-.0170	-.0170	-.0780	-.0780	-.0910		
115.000									-.0890	
125.000		-.0810	-.0730	.0310	.0400	-.0590	-.0760	-.0660	-.0870	
135.000				.2050	.1470	-.0510	-.0530	-.0250		
150.000		-.0830	-.0770	.0540	.1390	-.0380	-.0120	-.0160		
165.000		-.0810		.0290	.1430	.0840	.0310	-.0470		
180.000		-.0890	-.0800	-.0670						

MACH (1) = 2.490 BETAT (5) = 4.32U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2239	.2711	.3200	.3953	.5120
PHI															
.000	1.3490	.9680	.5110	.1380	-.0250	.1520			.1410		.0650	.0450	.0030	-.0580	-.0720
2.000			.4990	.1380	-.0390	.1140			.1780		.0520				
4.000			.4750	.1110	.0150	.1290			.1220		.0290	-.0300	-.0420	-.0940	-.0330
55.000			.4330	.0450	.0420	-.0220			.0220		.0490				
7.000			.3880	.0020	-.0230	-.0150			.0050		.0590	-.0290	-.0860	-.1070	-.1230
9.000		.8220	.3140	-.0190	-.0310	.0140			.0020		.0690	-.0380	-.0850	-.1110	-.1240
12.000			.2590	-.0070	-.0220	.0280			.0490		-.0250	-.1120	-.0990	-.1120	-.0970
142.000										-.0870					
150.000			.2520	.0120	-.0220	.0670			.0340		-.1170	-.1480	-.1300	-.0740	-.0670
157.000								.5330							
162.000									.0340						
165.000											-.1560	-.1550	-.1290	-.0730	-.0680
180.000									.0650						
172.000							.5410								
180.000	1.3490	.7810	.2390	.0510	.0800	.0930			.0220		-.1440	-.1440	-.1150	-.1520	-.1150

X/LB	.5073	.6628	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0700							-.0750		-.0550
40.000	-.0070	.5080		-.5070	-.0190	-.0440	-.1170			-.0690
75.000		-.1010	-.1110	-.1120	-.0890	-.0870	-.1180	-.1050		
90.000		-.0790	-.0980	-.0810	-.0650	-.0870	-.0900	-.0990		
105.000				-.0370	-.0490	-.0880	-.0890	-.0990		
115.000									-.0890	
125.000		-.0880	-.0730	.0080	.0180	-.0860	-.0880	-.0660	-.0690	
135.000				.2000	.1650	-.0840	-.0590	-.0540		
150.000		-.0880	-.0850	.0520	.1930	-.0260	-.0750	-.0310		

AMES 67-767 IA9 OEA + 33 + T9 ORBITER FUSELAGE (RUN81U)

MACH (1) = 2.490 BETAT (5) = 4.32U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6628	.738U	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392
PHI										
155.UU		-.184U		.U14U	.141U	.U34U	-.U05U	-.U38U		
19U.UU		-.151U	-.U93U	-.U45U						

MACH (1) = 2.458 BETAT (7) = 5.45U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.U675	.U188	.U339	.U502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.UUU	1.3150	.9340	.488U	.125U	-.U35U	.13UU			.U71U		.U40U	.UU9U	-.U12U	-.U57U	-.U58U
2U.UUU			.479U	.114U	-.U51U	.17UU			.142U		.U3UU				
4U.UUU			.434U	.U92U	-.U33U	.U48U			.1U8U		.UU1U	-.U55U	-.U73U	-.11BU	-.U72U
55.UUU			.377U	.U22U	-.UU1U	-.U45U			-.U23U		.U19U				
7U.UUU			.3U3U	-.U29U	-.U9UU	-.U35U			-.U93U		.U55U	-.U4UU	-.U95U	-.121U	-.135U
9U.UUU		.744U	.248U	-.U54U	-.U54U	-.122U			-.U16U		.U35U	-.U56U	-.U9BU	-.12UU	-.124U
12U.UUU			.212U	-.U35U	-.U45U	-.U29U			.U51U		-.U57U	-.128U	-.11BU	-.114U	-.U99U
142.UUU										-.1UBU					
15U.UUU			.221U	-.U4BU	.U43U	.U55U			.253U		-.136U	-.154U	-.144U	-.U86U	-.U83U
157.UUU								.368U							
162.UUU									.4U7U						
165.UUU											-.171U	-.158U	-.141U	-.11UU	-.U81U
169.UUU									.445U						
172.UUU							.448U								
175.UUU	1.3190	.751U	.229U	.U49U	.U52U	.12BU			.5UBU		-.14BU	-.145U	-.154U	-.177U	-.141U

X/LB	.5873	.6628	.734U	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392
PHI										
.UUU	-.145U							-.U9UU		-.U74U
4U.UUU	-.U13U	.U38U		-.U22U	-.U54U	-.U67U	-.U97U			-.U81U
7U.UUU		-.11BU	-.118U	-.115U	-.U9UU	-.U92U	-.1U8U	-.114U		
9U.UUU		-.U88U	-.U99U	-.U87U	-.U8BU	-.U73U	-.U65U	-.2U7U		
115.UUU				-.U36U	-.U63U	-.U75U	-.U92U	-.1U9U		
11U.UUU									-.1U7U	
125.UUU		-.1U1U	-.U6BU	.U55U	-.U4UU	-.U72U	-.U95U	-.U85U	-.U81U	
135.UUU				.3U1U	.21BU	-.U9BU	-.U82U	-.U78U		
15U.UUU		-.1U4U	-.1U4U	.U16U	.1U2U	-.U97U	-.U83U	-.U67U		
165.UUU		-.1U9U		-.U41U	.U87U	-.U17U	-.U9UU	-.U51U		
18U.UUU		-.12UU	-.113U	-.U99U						

AMES 87-747 IA9 OA ◆ 33 ◆ 79 ORBITER FUSELAGE (BBNB1U)

MACH (1) = 2.490 BETAT (8) = 8.58U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2820	.9010	.4180	.0770	.0320	.0870			.0170		.0070	-.0300	-.0430	-.0580	-.0280
2.000			.3920	.0920	-.0290	.1190			.0890		-.0030				
4.000			.3590	.0250	-.0340	.0850			.0540		-.0710	-.0880	-.1010	-.1370	-.1050
55.000			.3090	-.0320	-.0230	-.0710			-.0530		-.0160				
7.000			.2440	-.0560	-.0740	-.0370			-.0050		.0340	-.0560	-.0990	-.1240	-.1370
9.000		.6820	.2030	-.0790	-.0740	-.0340			-.0240		.0070	-.0770	-.0980	-.1220	-.1220
12.000			.1750	-.0930	-.1620	-.0420			-.0130		-.0750	-.1410	-.1220	-.1100	-.1200
142.000										-.1240					
150.000			.1930	-.0140	-.0690	-.0170			.2170		-.1480	-.1690	-.1570	-.0920	-.1080
157.000								.4110							
162.000									.3960						
165.000											-.1820	-.1730	-.1520	-.1600	-.1240
169.000									.4420						
172.000							.4200								
180.000	1.2820	.7480	.2310	.0410	.0470	.1060			.5870		-.1420	-.1310	-.1810	-.1920	-.1660

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0240							-.0890		-.0760
40.000	-.0710	-.0120		-.0800	-.0380	-.0770	-.0910			-.0890
7.000		-.1140	-.1220	-.1220	-.1220	-.0770	-.1140	-.1140		
9.000		-.0890	-.1040	-.0820	-.0790	-.0780	-.0960	-.1140		
155.000				-.0320	-.0720	-.0760	-.0980	-.1140		
115.000									-.1020	
120.000		-.1120	-.0860	.0030	.0470	-.1110	-.1140	-.1050	-.0950	
135.000				.2970	.2390	-.1110	-.0930	-.0820		
150.000		-.1230	-.1290	-.0580	-.0740	-.1620	-.1300	-.1570		
165.000		-.1250		-.0610	.0420	-.0910	-.0930	-.0850		
180.000		-.1360	-.1380	-.1200						

MACH (2) = 2.999 BETAT (1) = -0.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1440	.8350	.3750	.1200	.0810	.0000			.0580		-.0120	.0020	-.0310	-.0440	-.0250
2.000			.4080	.1620	.0960	.0810			.0120		-.0130				
4.000			.4090	.1630	.1030	.2840			.1380		.0670	-.0040	-.0640	-.0330	.0130
55.000			.3450	.2270	.1870	.3530			.2690		.1750				
7.000			.2270	.2270	.1440	.3410			.2830		.2130	.0780	.0090	-.0080	-.0120
9.000		1.0180	.5970	.1930	.1350	.1710			.2990		.2640	.0810	-.0020	-.0270	-.0330
120.000			.4930	.1620	..270	.1750			.2590		.1540	.0170	-.0230	-.0540	-.0710

AMES 87-707 IA9 02A + 93 + T9 ORBITER FUSELAGE (RBNB1U)

MACH (2) = 2.999 BETAT (1) = -8.54U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0870					
150.000			.3890	.1050	.0920	.1460			.5240		-.0260	-.0420	-.0410	-.0420	-.0610
157.000								.5590							
162.000									.5550						
165.000											-.0550	-.0290	.0010	-.0210	-.0630
169.000									.4780						
172.000							.4310								
180.000	1.1440	.7290	.2440	.0670	.0560	.0660			.5800		-.1140	-.1100	-.1170	-.1250	-.1310

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0370							-.0950		-.0840
42.000	.0590	.0730		.1840	.1800	.1150	.0390			-.0790
75.000		-.0340	-.0570	-.0420	-.0470	.0000	-.0030	-.0140		
90.000		-.0280	-.0480	-.0460	.0480	.0310	.0190	.0170		
105.000				.0170	.0990	.0660	.0350	.0080		
111.000									.0330	
120.000		-.0730	-.0780	.3240	.2320	.0840	.0220	.0090	.0010	
135.000				.0770	.1140	-.0640	-.0940	-.0850		
150.000		-.0740	-.0790	-.0520	-.0500	-.1170	-.1080	-.0870		
165.000		-.0720		-.0390	-.0460	-.0640	.0110	-.0290		
180.000		-.1110	-.1050	-.0660						

MACH (2) = 2.999 BETAT (2) = -6.39U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2840	.8830	.4010	.0320	.0250	-.0210			.0890		.0290	.0070	.0160	-.0180	-.0380
20.000			.4730	.0620	.0240	.0090			.0560		.0030				
40.000			.5940	.1480	.0490	.2150			.1130		.0470	-.0070	-.0530	-.0420	.0160
55.000			.6340	.1940	.1310	.3220			.2320		.1460				
70.000			.6180	.1930	.1080	.1500			.2540		.1790	.0590	-.0070	-.0290	-.0370
90.000		.9980	.5490	.1600	.1050	.1410			.1730		.2320	.0590	-.0190	-.0420	-.0520
120.000			.4580	.1380	.1060	.1410			.2010		.1290	.0120	-.0290	-.0630	-.0830
142.000										.0600					
150.000			.3720	.0970	.0840	.1300			.4960		-.0460	-.0470	-.0480	-.0510	-.0670
157.000								.5760							
162.000									.5310						
165.000											-.0650	-.0970	-.0250	-.0290	-.0670
169.000									.4760						
172.000							.5220								

AMES 67-757 IA9 ORA + 33 + T9 ORBITER FUSELAGE (RBNB1U)

MACH (2) = 2.999 BETAT (2) = -6.39U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.2800	.7480	.2920	.0720	.0590	.0600			.6130		-.1010	-.1090	-.1000	-.1140	-.1220

X/LB	.5875	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0580							-.0910		-.0650
40.000	.0500	.0650		.1520	.1310	.0690	.0170			-.0890
75.000		-.0520	-.0740	-.0620	-.0630	-.0230	-.0270	-.0320		
90.000		-.0470	-.0650	-.0650	.0160	.0040	-.0490	-.0420		
105.000				-.0070	.0480	.0560	.0110	-.0080		
110.000									.0560	
120.000		-.0820	-.0840	.2660	.1800	.0470	-.0030	-.0060	-.0140	
135.000				.0710	.0920	-.0830	-.1040	-.0890		
150.000		-.0840	-.0850	-.0520	-.0450	-.1200	-.1110	-.0730		
165.000		-.0820		-.0420	-.0120	-.0500	.0010	-.0370		
180.000		-.1020	-.0930	-.0790						

MACH (2) = 2.999 BETAT (3) = -4.240

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3130	.9130	.4240	.0550	.0430	-.0410			.1480		.0840	.0570	.0380	-.0120	-.0580
20.000			.4750	.0740	.0660	-.0390			.1140		.0380				
40.000			.5720	.1340	.0900	.1500			.1160		.0420	-.0030	-.0330	-.0360	.0030
55.000			.5990	.1650	.1140	.1440			.2020		.1200				
70.000			.5800	.1670	.0770	.1110			.2270		.1520	.0380	-.0210	-.0440	-.0570
90.000		.9890	.5480	.1280	.0740	.1110			.1180		.1880	.0430	-.0280	-.0490	-.0670
125.000			.4260	.1160	.0820	.1110			.1420		.0780	-.0090	-.0350	-.0700	-.0880
142.000										.0310					
150.000			.3610	.0890	.0750	.1130			.4630		-.0490	-.0640	-.0610	-.0630	-.0740
157.000								.5630							
162.000									.5970						
165.000											-.0730	-.0790	-.0560	-.0390	-.0720
180.000									.4760						
172.000							.5290								
180.000	1.3130	.7830	.2610	.0750	.0620	.0830			.6340		-.1010	-.1060	-.0960	-.1060	-.1100

X/LB	.5875	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0780							-.0750		-.0630
40.000	-.0610	.0230		.1140	.0850	.0430	-.0130			-.1040

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB10)

MACH (2) = 2.999 BETAT (3) = -4.240

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0710	-.0900	-.0850	-.0770	-.0320	-.0410	-.0530		
90.000		-.0700	-.0800	-.0790	-.0140	-.0110	-.0180	-.0240		
105.000				-.0220	.0050	.0310	.0010	-.0270		
110.000									.0270	
120.000		-.0910	-.0900	.1890	.1320	.0300	-.0100	-.0240	-.0340	
135.000				.0640	.0780	-.0790	-.0920	-.0890		
150.000		-.0870	-.0860	-.0420	-.0320	-.0980	-.0930	-.0860		
165.000		-.0860		-.0350	-.0090	-.0160	-.0060	-.0470		
180.000		-.0850	-.0850	-.0730						

MACH (2) = 2.999 BETAT (4) = -2.090

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.3320	.9500	.4540	.0720	.0280	-.0420			.1460		.1270	.0510	.0700	-.0140	-.0620
20.000			.4880	.0880	.0520	-.0380			.1440		.0740				
40.000			.5580	.1220	.0820	-.0230			.1290		.0440	.0100	.0000	-.0220	-.0270
55.000			.5630	.1370	.0820	.0580			.1700		.1020				
70.000			.5340	.1350	.0480	.0740			.1970		.1250	.0260	-.0320	-.0550	-.0680
90.000		.9560	.4520	.0920	.0470	.0780			.0830		.1450	.0330	-.0300	-.0590	-.0760
120.000			.3870	.0910	.0600	.0320			.1010		.0350	-.0280	-.0430	-.0730	-.0890
142.000										.0080					
150.000			.3380	.0760	.0660	.0960			.4220		-.0520	-.0750	-.0760	-.0700	-.0770
157.000								.5540							
162.000									.4820						
165.000											-.0800	-.0880	-.0780	-.0550	-.0680
169.000									.4760						
172.000							.5700								
180.000	1.3320	.7780	.2630	.0760	.0650	.0910			.6480		-.1010	-.0990	-.0940	-.0790	-.0780

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0800							-.0780		-.0520
40.000	-.0280	.0130		.0820	.0440	.0230	-.0430			-.1090
70.000		-.0850	-.0990	-.0940	-.0870	-.0560	-.0660	-.0660		
90.000		-.0850	-.0910	-.0850	-.0390	-.0530	-.0450	-.0420		
105.000				-.0270	-.0200	-.0010	-.0300	-.0440		
110.000									.0060	
120.000		-.0920	-.0880	.1100	.1010	-.0030	-.0360	-.0390	-.0450	
135.000				.0430	.0870	-.0560	-.0890	-.0750		
150.000		-.0830	-.0840	-.0130	.0020	-.0820	-.0670	-.0330		

AMES 87-707 IA9 C0A + S3 + T9 ORBITER FUSELAGE (RBN81U)

MACH (2) = 2.999 BETAT (4) = -2.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0780		-.0200	.0210	-.0250	-.0130	-.0430		
180.000		-.0720	-.0760	-.0710						

MACH (2) = 2.999 BETAT (5) = 2.230

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3420	.9530	.4460	.0640	.0270	-.0410			.1540		.1230	.0460	.0630	-.0160	-.0640
20.000			.4620	.0680	.0280	-.0400			.1550		.1190				
40.000			.4930	.0840	.0460	-.0280			.0780		.0640	.0230	-.0030	-.0390	-.0720
55.000			.4790	.0800	.0300	-.0080			.0040		.0780				
70.000			.4310	.0800	-.0030	.0190			.0150		.0240	.0090	-.0460	-.0680	-.0830
90.000		.8700	.3700	.0320	-.0050	.0250			.0130		.0200	-.0300	-.0450	-.0700	-.0880
120.000			.3030	.0430	.0180	.0330			.0260		-.0090	-.0780	-.0830	-.0730	-.0880
142.000										-.0330					
150.000			.2880	.0470	.0420	.0670			.0350		-.0740	-.1000	-.1040	-.0800	-.0560
157.000								.5260							
162.000									.0490						
165.000											-.1020	-.1090	-.1010	-.0820	-.0520
169.000									.0740						
172.000							.5700								
180.000	1.3420	.7780	.2590	.0720	.0640	.0880			.0420		-.1070	-.1050	-.0960	-.0820	-.0830

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0830							-.0720		-.0530
40.000	-.0660	-.0490		.0010	-.0040	-.0300	-.0890			-.0680
70.000		-.1050	-.1090	-.1010	-.0820	-.0810	-.0990	-.0830		
90.000		-.0970	-.0970	-.0680	-.0620	-.0640	-.0730	-.0720		
105.000				-.0540	-.0500	-.0650	-.0570	-.0700		
110.000									-.0190	
120.000		-.0820	-.0880	-.0130	.0050	-.0640	-.0560	-.0490	-.0510	
135.000				.1610	.0920	-.0650	-.0650	-.0370		
150.000		-.0680	-.0750	.0080	.0840	-.0650	-.0350	-.0340		
165.000		-.0650		-.0120	.0700	.0250	.0090	-.0400		
180.000		-.0750	-.0770	-.0710						

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB10)

MACH (2) = 2.999 BETAT (6) = 4.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/B	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.3140	.9150	.4230	.0500	.0370	-.0410			.1420		.0760	.0570	.0410	-.0140	-.0550
2.000			.4270	.0490	.0250	-.0390			.1600		.0970				
4.000			.4410	.0430	.0370	-.0270			.0650		.0410	.0130	-.0120	-.0540	-.0860
55.000			.4220	.0490	.0120	-.0260			-.0160		.0220				
7.000			.3720	.0470	-.0230	-.1650			-.0650		.0080	-.0670	-.0450	-.0720	-.0880
9.000		.8140	.3150	.0460	-.0230	.0040			-.0210		.0030	-.0550	-.0500	-.0720	-.0900
12.000			.2310	.0220	.0610	.0130			.0020		-.0290	-.0890	-.0940	-.0730	-.0820
142.000										-.0490					
150.000			.2610	.0370	.0310	.0550			.2080		-.0810	-.1110	-.1090	-.0860	-.0520
157.000								.5010							
162.000									.4430						
165.000											-.1110	-.1150	-.1030	-.0870	-.0590
169.000									.4670						
172.000							.4990								
180.000	1.3140	.7690	.2550	.0680	.0620	.0780			.6240		-.1020	-.1060	-.1010	-.1110	-.1150

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0740							-.0880		-.0550
4.000	-.0550	-.0190		-.0110	-.0130	-.0520	-.1060			-.0550
7.000		-.1050	-.1090	-.0860	-.0890	-.0980	-.0860			
9.000		-.0930	-.0940	-.0780	-.0710	-.0580	-.0830	-.0760		
105.000				-.0620	-.0690	-.0580	-.0830	-.0760		
110.000									-.0580	
120.000		-.0790	-.0830	.0280	-.0170	-.0680	-.0830	-.0530	-.0500	
135.000				.1290	.1020	-.0820	-.0830	-.0480		
150.000		-.0670	-.0750	.0220	.1270	-.0520	-.0690	-.0580		
165.000		-.0650		-.0330	.0670	.0440	-.0420	-.0410		
180.000		-.0910	-.0830	-.0740						

MACH (2) = 2.999 BETAT (7) = 6.570

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.2670	.8740	.3950	.0540	.0380	-.0450			.0780		.0250	-.0650	.0660	-.0170	-.0390
2.000			.3830	.0350	.0220	-.0560			.1360		.0510				
4.000			.3820	.0310	.0220	-.0480			.0650		.0130	-.0350	-.0440	-.0760	-.1010
55.000			.3570	.0140	-.0120	-.0380			-.0330		-.0070				
7.000			.3050	.0120	-.0480	-.0280			-.0250		.0010	-.0410	-.0620	-.0790	-.0950
9.000		.7240	.2570	-.0230	-.0510	-.0190			-.0330		-.0270	-.0730	-.0740	-.0760	-.0950
120.000			.2210	-.0030	-.0220	-.0120			-.0290		-.0580	-.1080	-.1050	-.0880	-.0720

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB10)

MACH (2) = 2.999 BETAT (7) = 6.570

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										-.0660					
150.000			.2330	.0200	.0140	.0300			.2370		-.1010	-.1300	-.1190	-.0950	-.0620
157.000								.4160							
162.000									.4250						
165.000											-.1330	-.1290	-.1110	-.1010	-.0890
169.000									.4490						
172.000							.4410								
180.000	1.2670	.7520	.2430	.0620	.0530	.0600			.5980		-.1090	-.1180	-.1140	-.1240	-.1260

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0580							-.0920		-.0650
40.000	-.0670	-.0250		-.0070	-.0520	-.0570	-.0930			-.0670
70.000		-.1060	-.1060	-.1000	-.0910	-.0900	-.0930	-.0860		
90.000		-.0950	-.0960	-.0840	-.0750	-.0740	-.0920	-.0780		
105.000				-.0580	-.0730	-.0740	-.0940	-.0790		
110.000									-.0530	
120.000		-.0860	-.0890	.0150	-.0270	-.0980	-.0930	-.0670	-.0590	
135.000				.1760	.1460	-.1000	-.0910	-.0690		
150.000		-.0840	-.0850	-.0100	.0750	-.0990	-.1060	-.0810		
165.000		-.0850		-.0500	.0280	-.0630	-.0730	-.0600		
180.000		-.1040	-.0950	-.0840						

MACH (2) = 2.999 BETAT (8) = 8.740

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1360	.8310	.3670	.0320	.0150	.0170			.0460		-.0110	.0080	-.0320	-.0510	-.0280
20.000			.3470	.0130	.0100	-.0410			.0410		.0050				
40.000			.3320	.0020	-.0110	-.0560			.0830		-.0270	-.0640	-.0800	-.0970	-.1100
55.000			.3030	-.0080	-.0390	-.0480			-.0440		-.0230				
70.000			.2510	-.0320	-.0640	-.0460			-.0270		-.0040	-.0450	-.0650	-.0820	-.0950
90.000		.6400	.2070	-.0410	-.0620	-.0360			-.0410		-.0340	-.0720	-.0740	-.0790	-.0950
120.000			.1870	-.0170	-.0380	-.0330			-.0260		-.0730	-.1140	-.1110	-.0900	-.0670
142.000										-.0800					
150.000			.2050	.0090	.0040	.0020			.1980		-.1010	-.1270	-.1210	-.0970	-.0940
157.000								.3840							
162.000									.4090						
165.000											-.1350	-.1280	-.1160	-.1220	-.1250
169.000									.4310						
172.000							.3540								

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AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBMB1U)

MACH (2) = 2.999 BETAT (8) = 8.74U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0044	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.1350	.7370	.2410	.0580	.0530	.0690			.5750		-.0990	-.1070	-.1260	-.1350	-.1380
X/LB	.5073	.5625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.1320							-.1120		-.0800					
40.000	-.0890	-.1410								-.0840					
70.000		-.1120	-.1180	-.1490	-.0730	-.0850	-.1040								
90.000		-.0950	-.1090	-.1660	-.0910	-.0920	-.1050	-.0920							
105.000				-.0870	-.0720	-.0810	-.1050	-.0850							
115.000				-.0530	-.0660	-.0790	-.1040	-.0850							
120.000									-.0780						
125.000		-.0780	-.0920	.0240	-.0220	-.1050	-.1030	-.0830	-.0740						
135.000				.1880	.1560	-.1040	-.1520	-.0760							
150.000		-.1070	-.1210	-.0560	-.0560	-.1420	-.1250	-.0980							
165.000		-.1090		-.0710	-.0310	-.1040	-.1030	-.0940							
180.000		-.1150	-.1090	-.0910											

MACH (3) = 3.502 BETAT (1) = -8.69U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0044	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0270	-.0040	-.0220			.0890		.0170	-.0240	-.0480	-.0330	-.0510
20.000			.4640	.0690	.0120	.1140			.0550		.0480				
40.000			.5750	.1610	.0950	.3170			.1910		.0890	.0330	-.0300	-.0440	.0030
55.000			.5220	.2070	.1520	.1740			.2830		.1920				
70.000			.5030	.1980	.1350	.1650			.3190		.2210	.0940	.0240	.0020	-.0130
90.000		.0000	.5080	.1280	.1250	.1640			.1720		.2660	.0950	.0120	-.0130	-.0280
120.000			.4840	.1570	.1250	.1570			.1720		.1240	.0130	-.0480	-.0460	-.0590
142.000										.0870					
150.000			.3750	.1040	.0920	.1310			.4970		-.0180	-.0440	-.0320	-.0410	-.0540
157.000								.5610							
162.000									.5430		-.0420	-.0420	-.0240	-.0090	-.0540
165.000									.4810						
169.000							.5410								
172.000									.5670		-.0810	-.0930	-.0930	-.0950	-.1130
180.000	.0000	.0000	.2480	.0560	.0560	.0560									
X/LB	.5073	.5828	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0320							-.0800		-.0770					
40.000	-.0090	.0450		.1550	.1200	.0890	.0480			-.0530					

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (3) = 3.962 BETAT (1) = -8.69

SECTION (1)ORBITER FUSELAGE DEPENCENT VARIABLE CP

X/LB	.3873	.8626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
71.000		-.0420	-.0620	-.0480	-.0450	.0080	.0000	-.0070		
90.000		-.0410	-.0480	-.0410	.0070	.0410	.0200	.0200		
109.000				-.0040	.0420	.1570	.0510	.0230		
110.000									.0150	
125.000		-.0790	-.0750	.2540	.2030	.0770	.0380	.0250	.0150	
135.000				.0540	.0960	-.0560	-.0620	-.0660		
150.000		-.0720	-.0760	-.0480	-.0470	-.0850	-.0790	-.0660		
165.000		-.0710		-.0440	-.0220	-.0490	-.0020	-.0230		
180.000		-.1580	-.1120	-.0790						

MACH (3) = 3.962 BETAT (2) = -6.54

SECTION (1)ORBITER FUSELAGE DEPENCENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0370	.0050	-.0460			.0140		.0320	.0130	-.0020	-.0030	-.0390
25.000			.4710	.0690	.0120	-.0250			.0540		.0200				
40.000			.5880	.1440	.0750	.1210			.1760		.0580	.0360	-.0260	-.0480	-.0690
55.000			.9990	.1820	.1290	.1320			.2470		.1640				
70.000			.5610	.1710	.1480	.1220			.1310		.1990	.1050	.0210	-.0120	-.0280
90.000		.0000	.5330	.1510	.0980	.1240			.1350		.1080	.0820	.0190	-.0220	-.0420
125.000			.4460	.1360	.1010	.1270			.1340		.0200	.0080	-.0090	-.0440	-.0660
142.000										.0660					
150.000			.3620	.0980	.0830	.1190			.0640		-.0180	-.0380	-.0430	-.0460	-.0580
157.000								.5500							
162.000									.0160						
165.000											-.0360	-.0420	-.0440	-.0230	-.0480
169.000									.0750						
172.000							.5350								
180.000	.0000	.0400	.2490	.0690	.0610	.0710			.0940		-.0660	-.0750	-.0870	-.0890	-.1030

X/LB	.3873	.8626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0440							-.0630		-.0600
40.000	-.0870	.0330		.1410	.1020	.0580	.0380			-.0630
71.000		-.0540	-.0720	-.0570	-.0570	-.0120	-.0170	-.0220		
90.000		-.0520	-.0620	-.0570	-.0120	.0160	.0030	.0030		
109.000				-.0210	.0180	.0700	.0310	.0050		
110.000									-.0010	
125.000		-.0750	-.0760	.1910	.1480	.0400	.0180	.0030	-.0010	
135.000				.0450	.0880	-.0550	-.0680	-.0680		
150.000		-.0730	-.0770	-.0520	-.0400	-.0820	-.0670	-.0660		

DATE 17 SEP 79 TABULATED PRESSURE DATA - IA9C

AMES 87-767 IA9 (82A + 83 + 79 ORBITER FUSELAGE (2918)

MACH (1) = 3.962 BETAT (2) = -6.9%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/B	.5873	.6628	.7382	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
155.00		-.0748		-.0489	-.1239	-.1668	.0000	-.0339		
180.00		-.1908	-.1915	-.1739						

MACH (3) = 3.962 BETAT (3) = -4.31%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/B	.0000	.0375	.0188	.0339	.0542	.1355	.1946	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5128
PHI															
.00	.0000	.0000	.0000	.0485	.0180	-.0340			.0580		.0488	.0910	.0370	.0130	-.0320
20.00			.4868	.0899	.0380	-.0380			.0840		.0468				
40.00			.5748	.1398	.0790	.0270			.1550		.0590	.0150	-.0250	-.0300	-.0120
55.00			.5778	.1670	.1170	.0810			.2170		.1398				
70.00			.3548	.1488	.0830	.0720			.0950		.1648	.0510	-.0070	-.0230	-.0440
90.00		.0000	.4598	.1350	.0890	.0720			.0990		.1458	.0570	-.0240	-.0290	-.0510
120.00			.4198	.1220	.0240	.0100			.1120		.0618	-.0220	-.0150	-.0470	-.0690
142.00										.0410					
150.00			.3538	.0970	.0780	.0150			.0230		-.0350	-.0530	-.0530	-.0500	-.0640
157.00								.0280							
162.00									.0870						
165.00											-.0590	-.0680	-.0570	-.0400	-.0520
169.44									.0710						
172.00							.0990								
180.00	.0000	.0000	.2650	.0810	.0480	.0620			.0150		-.0760	-.0840	-.0890	-.0830	-.0920

X/LB	.5873	.6628	.7382	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.00	-.0590							-.0630		-.0450
40.00	-.0890	.0010		.1190	.0680	.0350	.0140			-.0730
70.00		-.0750	-.0810	-.0700	-.0680	-.0290	-.0320	-.0390		
90.00		-.0680	-.0750	-.0680	-.0330	-.0180	-.0150	-.0180		
115.00				-.0480	-.0890	.0340	.0110	-.0140		
135.00									-.0180	
150.00		-.0790	-.0810	.1380	.0110	.0030	-.0010	-.0150	-.0180	
165.00				.0450	.0640	-.0620	-.0720	-.0680		
190.00		-.0740	-.0880	-.0510	-.0390	-.0890	-.0760	-.0710		
185.00		-.0790		-.0510	-.0230	-.0250	-.0180	-.0450		
180.00		-.0850	-.0880	-.0790						

AMES 87-767 IA9 ORA + S3 + T9 ORBITER FUSELAGE (FBNB1U)

MACH (3) = 3.502 BETAT (4) = -2.13U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0568	-.0150	-.0350			.0290		.1390	.0790	.0680	.0070	-.0350
25.000			.5140	.0920	.0040	-.0380			.0230		.0550				
40.000			.5750	.1330	.0500	-.0110			.0620		.0520	.0240	.0040	-.0180	-.0130
55.000			.5750	.1440	.0870	.0520			.0550		.1190				
70.000			.5270	.1210	.0590	.0520			.0680		.0880	.0410	-.0110	-.0350	-.0530
90.000		.0000	.4470	.0990	.0590	.0570			.0470		.0670	.0310	-.0070	-.0390	-.0600
120.000			.3770	.0950	.0660	.0770			.0620		.0270	-.0360	-.0440	-.0520	-.0710
142.000										.0200					
150.000			.3290	.0810	.0580	.0900			.0870		-.0340	-.0540	-.0640	-.0610	-.0690
157.000								.5240							
162.000									.0490						
165.000											-.0520	-.0640	-.0690	-.0620	-.0530
180.000									.0490						
172.000							.5240								
180.000	.0000	.0000	.2610	.0780	.0670	.0850			.0330		-.0700	-.0750	-.0760	-.0710	-.0690

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0980							-.0650		-.0380
40.000	-.0330	-.0330		.0630	.0360	.0030	-.0240			-.0840
70.000		-.0810	-.0910	-.0810	-.0780	-.0490	-.0540	-.0530		
90.000		-.0790	-.0880	-.0770	-.0900	-.0340	-.0380	-.0370		
109.000				-.0480	-.0310	-.0060	-.0180	-.0340		
115.000									-.0330	
120.000		-.0830	-.0890	.0610	.0680	-.0250	-.0250	-.0320	-.0320	
135.000				.0280	.0520	-.0680	-.0650	-.0540		
150.000		-.0750	-.0780	-.0320	-.0180	-.0680	-.0650	-.0510		
165.000		-.0710		-.0440	.0030	-.0230	-.0200	-.0440		
180.000		-.0880	-.0880	-.0630						

MACH (3) = 3.502 BETAT (5) = 2.280

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	.0000	.0000	.0000	.0540	-.0140	-.0380			.0000		.1460	.0710	.0610	.0090	-.0340
20.000			.4990	.0700	-.0140	-.0390			.0320		.1360				
40.000			.5220	.1140	.0170	-.0320			.0230		.0160	.0190	-.0110	-.0120	-.0450
55.000			.5190	.0980	.0440	-.0680			.0030		.0020				
70.000			.4350	.0710	.0180	.0070			.0150		-.0660	-.0480	-.0320	-.0510	-.0630
90.000		.1440	.3810	.0490	.0170	.0190			.0220		-.0660	-.0440	-.0570	-.0510	-.0680
120.000			.3040	.0540	.0310	.0380			.0150		-.0140	-.0670	-.0730	-.0700	-.0700

DATE 17 SEP 79 TABULATED PRESSURE DATA - TASC

AMES 37-7x7 TA9 OEA + 93 + 79 ORBITER FUSELAGE (EXHIBIT)

MACH (3) = 3.962 BETA (5) = 2.26

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0188	.0339	.0562	.1355	.1526	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5125
ETA															
142.0000									.3459	-.0130					
150.0000			.2686	.1999	.1511	.1650		.4879			-.0577	-.0808	-.0830	-.0780	-.0620
157.0000									.4459						
162.0000											-.0789	-.0877	-.0844	-.0739	-.0650
165.0000									.4719						
169.0000							.4795								
172.0000									.6319		-.0859	-.0859	-.0779	-.0729	-.0729
179.0000	.0000	.0000	.2619	.1749	.1099	.1849									

X/LB	.3875	.4829	.7389	.7889	.8283	.8548	.9282	.9639	1.0015	1.0392
ETA										
142.0000								-.0549		-.0389
150.0000	-.0819									-.0729
157.0000	-.0899	-.0929		-.0489	-.0199	-.0349	-.0659			
162.0000		-.0919	-.0989	-.0899	-.0799	-.0689	-.0759	-.0689		
165.0000		-.0889	-.0939	-.0719	-.0869	-.0589	-.0999	-.0819		
169.0000				-.0579	-.0959	-.0939	-.0559	-.0579		
172.0000									-.0589	
179.0000		-.0789	-.0819	-.0289	-.0189	-.0959	-.0959	-.0469	-.0449	
185.0000				.1119	.0999	-.0919	-.0559	-.0499		
192.0000		-.0629	-.0679	-.0139	.0519	-.0439	-.0379	-.0359		
199.0000		-.0999		-.0299	.0529	.0269	.0989	-.0319		
180.0000		-.0719	-.0759	-.0629						

MACH (3) = 3.962 BETA (5) = 4.48

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0188	.0339	.0562	.1355	.1526	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5125
ETA															
142.0000	.0000	.0000	.0000	.0379	.0269	-.0379			.0999		.0799	.0659	.0389	.0099	-.0379
150.0000			.4419	.0669	-.0379	-.0379			.0429		.1119				
157.0000			.4559	.0759	.0269	-.0339			.0999		.0259	.0019	-.0289	-.0279	-.0649
162.0000			.4479	.0619	.0229	-.0319			-.0179		-.0139				
165.0000			.3649	.0359	-.0279	-.0179			-.0129		-.0229	-.0479	-.0489	-.0579	-.0729
169.0000		.0000	.2969	.0169	-.0289	.0019			-.0259		-.0179	-.0589	-.0799	-.0559	-.0749
172.0000			.2599	.0299	.0089	.0139			-.0089		-.0399	-.0799	-.0899	-.0769	-.0719
179.0000										-.0299					
185.0000									.2589		-.0439	-.0869	-.0999	-.0879	-.0669
192.0000			.2819	.0429	.0339	.0529		.4559							
197.0000									.4389						
192.0000											-.0969	-.0929	-.0699	-.0849	-.0729
185.0000									.4599						
199.0000							.4459								
172.0000															

| | | |

AMES 87-PLT BAS CRA + 93 + 79 ORBITER FUSELAGE (RUN81)

MACH (3) = 3.962 BETA (7) = 0.00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/B	.0373	.0626	.0739	.0939	.2293	.3848	.5292	.6639	1.0015	1.0392
Z/B										
0.000		-.1999	-.1146	-.0939	-.0779	-.0799	-.0659			
2.000		-.1999	-.0599	-.0799	-.0579	-.0679	-.0719			
5.000				-.0729	-.0779	-.0819	-.0819	-.0729		
11.000									-.0589	
12.000		-.0799	-.0589	.0999	-.0599	-.0999	-.0999	-.0799	-.0599	
15.000				.0659	-.0559	-.0659	-.0799	-.0679		
19.000		-.0919	-.0699	-.0339	.0259	-.0639	-.0549	-.0659		
23.000		-.0599		-.0599	-.0179	-.0579	-.0639	-.0559		
27.000		-.0119	-.0599	-.0729						

MACH (3) = 3.962 BETA (8) = 0.00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/B	.0000	.0375	.0750	.1000	.1339	.1812	.1355	.1548	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5129
Z/B																
0.000	.0000	.0000	.0000	.0000	.1259	-.0939	-.1579			.1822		.0111	-.1229	-.1149	-.1389	-.1479
2.000				.3429	.1729	-.0119	-.0819			.0599		-.0999				
4.000				.3399	.1129	-.0229	-.0559			-.0479		-.1359	-.1729	-.1799	-.1799	-.1929
5.000				.3289	-.0339	-.0339	-.0559			-.0449		-.0809				
7.000				.2799	-.1229	-.0499	-.1429			-.0399		-.1479	-.1729	-.1749	-.1899	-.1999
9.000		.0000		.1929	-.1579	-.1449	-.1369			-.1479		-.1639	-.1899	-.1659	-.1679	-.1999
12.000				.1779	-.1149	-.0599	-.1229			-.1549		-.1779	-.2129	-.1999	-.1949	-.1719
142.000											-.0589					
15.000				.1379	.0429	.0999	.0129			.1779		-.0999	-.1159	-.1149	-.1579	-.1999
157.000									.3969							
162.000										.3999						
165.000												-.1129	-.1119	-.1079	-.1159	-.1179
169.000										.4159						
172.000								.3919								
175.000	.0000	.0000	.2389	.1579	.0999	.0159				.5999		-.1249	-.1659	-.1179	-.1179	-.1279

X/B	.3873	.4626	.7389	.7869	.8283	.8848	.9292	.9639	1.0015	1.0392
Z/B										
0.000	-.0699							-.1579	-.1769	
4.000	-.1999	-.1849		-.1599	-.1689	-.1739	-.1799		-.1999	
7.000		-.1999	-.1469	-.1579	-.1519	-.1729	-.1829	-.1739		
9.000		-.1919	-.1999	-.1819	-.1629	-.1739	-.1819	-.1779		
155.000				-.1739	-.1799	-.1719	-.1819	-.1819		
111.000									-.1799	
12.000		-.1999	-.1919	-.1939	-.1459	-.1899	-.1819	-.1699	-.1729	
139.000				.1919	.1769	-.1729	-.1799	-.1719		
195.000		-.1179	-.1119	-.1339	-.1249	-.1199	-.1599	-.1249		

AMES 87-757 IA9 02A + 33 + T9 ORBITER FUSELAGE (P9NB1%)

MACH (3) = 3.5%2 BETAT (0) = 0.9%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.5826	.7539	.7988	.8283	.8548	.9292	.9639	1.%%15	1.%392
Y=I										
185.%%		-.11%%		-.%%%%	-.%79%	-.%79%	-.%99%	-.%80%		
180.%%		-.11%%	-.1%8%	-.%87%						

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNB11) (15 MAY 73)

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.939 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .038 SCALE

PARAMETRIC DATA

ALPHAT = -8.00 ORBINC = .00
RUDDER = -15.00 ELEVON = .00
RUDFLR = .00

MACH (1) = 2.498 BETAT (1) = -8.39

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6960	.9810	.4140	.0430	.0860	.3020			.1550		.1030	.1050	.0500	.0270	-.0040
25.000			.5010	.0700	.1010	.3920			.2050		.1100				
40.000			.5820	.1450	.1560	.4090			.2640		.1390	.0860	.0840	.0470	.1440
55.000			.7730	.2400	.2040	.5740			.4760		.3860				
70.000			.8340	.2750	.2410	.3490			.5430		.4620	.1990	.0920	.1110	.1330
90.000		1.4470	.8690	.3280	.2640	.3500			.4500		.4780	.1920	.1110	.0960	.1090
125.000			.8930	.4110	.3800	.4290			.5500		.3150	.1440	.1270	.0950	.0900
142.000										.2150					
150.000			.8480	.3950	.4320	.5340			1.1310		.1360	.0700	.1110	.1050	.0770
157.000								1.3160							
162.000									1.1160						
165.000											.0280	.0770	.1040	.1160	.0790
169.000									.9980						
172.000							1.2650								
180.000	1.6980	1.3330	.6670	.3780	.3840	.5740			1.2580		-.0290	-.0180	.0090	.0190	-.0430

X/LB	.5873	.6526	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0130							-.1450		-.1270
40.000	.1240	.1180		.2180	.1290	.0850	-.0140			-.1220
75.000		.0840	.0580	.0560	.1180	.1150	.0890	.0990		
90.000		.1060	.0700	.1290	.1630	.1700	.1210	.0920		
105.000				.2330	.2400	.1910	.1110	.0790		
115.000									.1510	
120.000		.0880	.0820	.5300	.3680	.1430	.1170	.1110	.0970	
135.000				.5490	.4830	.0710	.0580	.0790		
150.000		.0670	.0630	.1790	.2550	-.0040	.0920	.1760		
165.000		.0670		.2060	.3610	.2550	.2960	.1770		
180.000		-.0890	-.0590	.0060						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (1) = 2.498 BETAT (2) = -5.270

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7030	.9850	.4800	.0350	.1140	.2470			.1660		.1580	.1020	.0560	.0290	.0080
20.000			.5360	.0730	.1260	.2940			.2190		.1570				
40.000			.6570	.1540	.1430	.2000			.2620		.1310	.0920	.0620	.0310	.1120
55.000			.7140	.2070	.1850	.2770			.4390		.3540				
70.000			.7600	.2230	.1970	.2890			.3300		.4240	.1700	.0660	.0870	.1150
90.000		1.3830	.8000	.2730	.2130	.2780			.3610		.4130	.1630	.0870	.0720	.0870
120.000			.8330	.3540	.3370	.3740			.4640		.2430	.0730	.1150	.0770	.0720
142.000										.1760					
150.000			.8170	.3710	.4070	.5000			1.0730		.1050	.0430	.0540	.0830	.0700
157.000								1.2650							
162.000									1.0670						
165.000											.0830	.0370	.0590	.0930	.0660
169.000									1.0000						
172.000							1.2670								
180.000	1.7030	1.3410	.6670	.3780	.3810	.5650			1.2740		-.0310	-.0250	.0170	.0210	-.0030

X/LB	.5873	.6826	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0280							-.1910		-.1230
40.000	.1520	.0980		.1710	.0950	.0420	-.0440			-.1420
70.000		.0610	.0300	.0340	.0680	.0890	.0680	.0700		
90.000		.0770	.0430	.0930	.1320	.1540	.1010	.0640		
105.000				.1930	.2160	.1640	.0900	.0540		
110.000									.0930	
120.000		.0720	.0630	.4640	.3060	.1180	.0960	.0910	.0750	
135.000				.5590	.4730	.0690	.0570	.0840		
150.000		.0560	.0490	.1870	.2870	.0120	.1120	.1850		
165.000		.0550		.1990	.3700	.2800	.2890	.1490		
180.000		-.0270	-.0350	.0660						

MACH (1) = 2.498 BETAT (3) = -4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7100	.9615	.4220	.0190	.0260	.2130			.1110		.1220	.1480	.0750	.0910	.0410
20.000			.4740	.0470	.0330	.2180			.2180		.1270				
40.000			.5890	.1110	.0810	.1260			.2850		.1230	.0830	.0600	.0300	.0990
55.000			.6420	.1500	.1350	.2210			.3370		.3220				
70.000			.6840	.1700	.1430	.2230			.2460		.3690	.1420	.0420	.0690	.0840
90.000		1.3190	.7280	.2200	.1600	.2090			.2780		.2490	.1450	.0720	.0470	.0640
120.000			.7830	.3240	.2900	.3090			.4260		.1860	.0640	.0870	.0690	.0560

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (1) = 2.498 BETAT (3) = -4.16

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.0000										.1310					
150.0000			.7860	.3530	.3810	.4990			1.0030		.0740	.0110	.0220	.0650	.0650
157.0000								1.2140							
162.0000									1.0280						
165.0000											-.0170	-.0440	.0320	.0590	.0620
169.0000									.9970						
172.0000							1.2460								
180.0000	1.7110	1.3480	.6720	.3790	.3830	.5850			1.2830		-.0430	-.0220	.0090	.0170	.0270
X/LB	.5873	.6825	.7380	.7880	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.0000	.0440							-.1370		-.1130					
40.0000	.0750	.0840		.1280	.0540	.0240	-.0660			-.1520					
70.0000		.0460	.0180	.0190	.0630	.0800	.0570	.0530							
90.0000		.0960	.0320	.0830	.1050	.1290	.0870	.0530							
115.0000				.1650	.1510	.1390	.0780	.0430							
110.0000									.1040						
120.0000		.0580	.0550	.3960	.2620	.0870	.0760	.0690	.0680						
135.0000				.5730	.4670	.0870	.0520	.0980							
150.0000		.0470	.0480	.2540	.3370	.0390	.1340	.1960							
165.0000		.0430		.1980	.3940	.2960	.2860	.1330							
180.0000		.0960	.0170	.0950											

MACH (1) = 2.498 BETAT (4) = .06

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.0000	1.7180	.9570	.3970	.0140	.0320	.2160			.0910		.0540	.1940	.1180	.0770	.0440
20.0000			.4190	-.0090	.0320	.2240			.1110		.0720				
40.0000			.5020	.0390	.1260	.2460			.1470		.1210	.0660	.0870	.0540	.0590
55.0000			.5290	.0710	.0480	.1510			.1920		.2750				
70.0000			.5590	.0660	.0460	.1290			.1540		.2660	.1010	.0140	.0290	.0510
90.0000		1.1860	.5930	.1310	.0760	.1170			.1850		.1220	.0340	.0460	.0160	.0370
120.0000			.6710	.2450	.2190	.2050			.2210		.0930	-.0430	-.0390	.0350	.0230
142.0000										.0660					
150.0000			.7220	.3130	.3350	.4160			.8840		.0240	-.0330	-.0290	.0020	.0520
157.0000								1.1370							
162.0000									.9490						
165.0000											-.0480	-.0410	-.0260	.0120	.0460
169.0000									.9920						
172.0000							1.2660								

AMES 87-747 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB11)

MACH (1) = 2.490 BETAT (4) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.7480	1.3380	.6890	.3770	.3830	.5130			1.2780		-.0440	-.0080	-.0060	.0150	.0190
X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0380							-.1330		-.1010					
40.000	.0440	.0470		.0350	-.0160	-.0590	-.0860			-.1460					
70.000		.0330	-.0020	-.0420	.0370	.0410	.0230	.0190							
90.000		.0510	.0210	.0790	.0720	.0710	.0390	.0180							
105.000				.1240	.0760	.0760	.0280	.0110							
115.000									.0930						
125.000		.0490	.0490	.2710	.1780	-.0110	.0170	.0500	.0440						
135.000				.6050	.4720	-.0110	.0270	.0790							
150.000		.0450	.0540	.2610	.4570	.1140	.1560	.1600							
165.000		.0490		.2250	.4110	.3230	.2580	.1230							
180.000		.0550	.0530	.0540											

MACH (1) = 2.490 BETAT (5) = 4.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7590	.9870	.4830	.3410	.3690	.2130			.1570		.1110	.1440	.0860	.0720	.0390
20.000			.4580	.3380	.3650	.1800			.0840		.1080				
40.000			.4790	.3430	.3550	.1720			.1090		.0720	.1310	.0740	.0460	.0160
55.000			.4580	.3380	.3510	.1790			.0960		.1330				
70.000			.4410	.3310	.3490	.1820			.1130		.1090	-.0110	-.0150	.0080	.0430
90.000		1.0520	.4740	.3580	.3240	.1740			.1580		.0450	-.0480	-.0510	-.0110	.0220
120.000			.5630	.1790	.1490	.1610			.1630		.0150	-.0930	-.0870	-.0480	.0140
142.000										.0210					
150.000			.6510	.2770	.2940	.3550			.7590		-.0250	-.0730	-.0410	-.0240	.0000
157.000								.9860							
162.000									.9170						
165.000											-.0710	-.0560	-.0190	-.0040	-.0110
169.000									.9930						
172.000							1.1730								
180.000	1.7590	1.3360	.6680	.3760	.3850	.5320			1.2670		-.0430	-.0150	.0000	.0060	.0280
X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9762	.9639	1.0015	1.0392					
PHI															
.000	.0490							-.1360		-.1140					
20.000	.0180	.0290		-.0340	-.0670	-.0880	-.1180			-.1020					

AMES 67-7U7 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (1) = 2.498 BETAT (5) = 4.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392
PHI										
7.000		.0270	-.0440	.0410	.0410	.0090	.0070	-.0020		
90.000		.0460	.0270	.0610	.0460	.0500	.0160	-.0020		
115.000				.0890	.0250	.0500	.0040	-.0080		
130.000									.0510	
155.000		.0470	.0150	.2360	.0950	-.0500	-.0460	.0010	.0140	
165.000				.7130	.4620	.0690	.0030	.0170		
175.000		.0830	.0240	.2390	.6140	.1380	.1330	.0970		
185.000		-.0140		.1350	.5720	.2810	.1630	.0790		
205.000		.0010	.0120	.0610						

MACH (1) = 2.498 BETAT (6) = 6.490

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1155	.1546	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6950	.9770	.4570	.0420	.0720	.2430			.1490		.1180	.1020	.0500	.0220	.0650
20.000			.4350	.0300	.0550	.2530			.1030		.1160				
40.000			.4240	.0220	.0280	.0760			.0830		.0580	.1180	.0560	.0220	-.0020
55.000			.3950	.0060	.0160	.0750			.0940		.1090				
70.000			.3830	-.0040	.0150	.0510			.1140		.1020	-.0170	-.0480	.0040	.0420
90.000		.9820	.4130	.0280	-.0060	.0350			.0540		-.0030	-.0690	-.0620	-.0260	.0240
120.000			.5150	.1460	.1210	.1030			.1030		-.0040	-.1060	-.1070	-.0780	-.0420
142.000										.0000					
150.000			.6150	.2580	.2730	.3760			.7150		-.0320	-.0770	-.0480	-.0290	-.0680
157.000								1.0310							
162.000									.8930						
165.000											-.0820	-.0510	-.0190	-.0180	-.0510
169.000									.9860						
172.000							1.2150								
180.000	1.6950	.3490	.6640	.3730	.3860	.5160			1.2590		-.0320	-.0240	.0130	.0110	-.0010

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392
PHI										
.000	.0340							-.1420		-.1170
40.000	.0040	-.0130		-.0610	-.0840	-.1250	-.1430			-.1050
70.000		.0300	-.0010	.0020	.0250	.0340	.0010	-.0080		
90.000		.0480	.0140	.0580	.0470	.0340	.0020	-.0140		
105.000				.0910	.0210	.0280	-.0140	-.0190		
115.000									.0680	
125.000		.0410	.0290	.2030	.0670	-.0790	-.0650	-.0360	-.0190	

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (1) = 2.498 BETAT (6) = 6.460

SECTION (4)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0560		.1200	.4010	.1600	.1130	.0430		
180.000		-.0250	-.0290	.0700						

MACH (1) = 2.498 BETAT (7) = 8.600

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6870	.9780	.3970	.0400	.0860	.2880			.1470		.1120	.1030	.0440	.0260	.0000
20.000			.3720	.0270	.0510	.2120			.1170		.0680				
40.000			.3770	-.0010	.0110	.0930			.0540		.0460	.0040	-.0290	-.0150	-.0110
55.000			.3620	-.0310	-.0110	.0660			.0910		.0980				
70.000			.3400	-.0320	-.0160	.0210			.0930		.1020	-.0260	-.0670	-.0110	.0390
90.000		.9330	.3590	.0000	-.0280	.0010			.0170		-.0380	-.0680	-.0770	-.0620	.0070
125.000			.4640	.1160	.0890	.0650			.0680		-.0440	-.1220	-.1210	-.0970	-.0390
142.000										-.0210					
150.000			.5790	.2410	.2480	.3290			.6410		-.0490	-.0890	-.0610	-.0290	-.0230
157.000								.9290							
162.000									.8810						
165.000											-.1010	-.0510	-.0250	-.0530	-.0790
169.000									.9860						
172.000							1.1360								
180.000	1.6870	1.3430	.6540	.3670	.3790	.5570			1.2430		-.1260	-.0230	.0690	.0230	-.0460

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0080							-.1380		-.1340
40.000	-.0110	.0040		-.0750	-.1000	-.1420	-.1540			-.1300
70.000		.0330	.0010	-.0020	.0250	.0390	-.0010	-.0200		
90.000		.0290	.0030	.0310	.0540	.0240	-.0090	-.0270		
105.000				.0960	.0340	.0260	-.0200	-.0240		
110.000									.0570	
120.000		.0230	.0130	.2160	.0330	-.0830	-.0820	-.0510	-.0440	
135.000				.4290	.3910	-.0370	-.0650	-.0590		
150.000		-.0890	-.0550	.0530	.1840	.1250	.0660	.0380		
165.000		-.0850		.0600	.2160	.0640	.0330	-.0360		
180.000		-.0740	-.0580	.0660						

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AMES 67-707 IA9 (B2A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (2) = 2.999 BETAT (1) = -8.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8770	1.5000	.4270	.0200	.0380	.1480			.1780		.1240	.0920	.0950	.0340	.0180
20.000			.5120	.0550	.0490	.1360			.3060		.1320				
40.000			.6990	.1540	.0970	.1650			.4200		.2010	.1340	.0520	.0860	.0780
55.000			.8030	.1900	.2510	.2460			.3030		.4420				
70.000			.8830	.2980	.2360	.2430			.2780		.5020	.2540	.1350	.1470	.1450
90.000		1.5990	.9440	.3510	.2650	.2730			.3070		.2830	.2220	.1640	.1230	.1210
120.000			.9560	.4270	.3840	.4160			.5550		.2880	.0830	.0710	.1280	.0930
142.000										.2650					
150.000			.8970	.4280	.4180	.5080			1.1960		.1160	.0860	.0630	.0770	.0770
157.000								1.3860							
162.000									1.2560						
165.000											.0640	.0640	.0810	.0600	.0880
169.000									1.1410						
172.000							1.2870								
180.000	1.8770	1.4560	.7000	.3890	.3730	.5070			1.4490		.0010	-.0090	.0170	-.0200	-.0270

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0030							-.1250		-.1090
40.000	.1360	.1430		.2420	.1940	.1100	.0290			-.0850
70.000		.0710	.0290	.0360	.0870	.0930	.0710	.0870		
90.000		.0850	.0520	.0620	.1310	.1640	.1410	.1180		
105.000				.1790	.1780	.2050	.1360	.1090		
110.000									.1460	
120.000		.0830	.0700	.5190	.3620	.1100	.1360	.1400	.1260	
135.000				.5510	.4970	.0590	.0430	.0880		
150.000		.0690	.0670	.1690	.2560	-.0090	.0190	.1400		
165.000		.0790		.1740	.3090	.1990	.2610	.1650		
180.000		-.0670	-.0560	-.0220						

MACH (2) = 2.999 BETAT (2) = -6.410

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8920	.9980	.4220	.0180	.0360	.2090			.1540		.1140	.1240	.1180	.0460	.0000
20.000			.4920	.0470	.0390	.1230			.2420		.1900				
40.000			.6530	.1270	.0910	.1410			.1830		.1930	.1260	.0800	.0720	.0650
55.000			.7430	.1520	.1610	.2330			.2400		.4150				
70.000			.8100	.2530	.1920	.2160			.2330		.3040	.2260	.1200	.1200	.1160
90.000		1.5310	.8710	.3090	.2180	.2280			.2610		.2360	.1080	.1470	.1000	.1000
120.000			.8980	.4010	.3410	.3640			.4590		.2490	.0610	.0460	.1010	.0760

AMES 87-707 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (2) = 2.999 BETAT (2) = -6.410

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.2230					
150.000			.8670	.4010	.3980	.4780			1.1320		.1050	.0670	.0450	.0480	.0640
157.000								1.3490							
162.000									1.2080						
165.000											.0530	.0430	.0590	.0430	.0710
169.000									1.1350						
172.000							1.3040								
180.000	1.8920	1.4690	.7050	.4010	.3760	.4970			1.4640		.0040	-.0060	.0120	.0100	.0050

X/LB	.5875	.6626	.7380	.7889	.8283	.8848	.9262	.9839	1.0015	1.0392
PHI										
.000	-.0080							-.1350		-.1090
40.000	.0930	.0850		.1950	.1480	.0630	-.0050			-.0900
70.000		.0540	.0140	.0190	.0570	.0520	.0410	.0640		
90.000		.0670	.0340	.0390	.0970	.1290	.1080	.0930		
105.000				.1590	.1410	.1590	.1030	.0890		
110.000									.0760	
120.000		.0730	.0610	.4810	.3170	.0610	.0890	.1150	.1080	
135.000				.5550	.4810	.0590	.0290	.0630		
150.000		.0620	.0570	.1660	.2670	-.0070	.0310	.1350		
165.000		.0650		.1630	.3060	.2250	.2550	.1600		
180.000		-.0210	-.0370	.0370						

MACH (2) = 2.99[illegible] BETAT (3) = -4.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.9050	.9930	.4180	.0190	.0390	.1870			.1340		.0560	.1310	.1000	.0540	.0310
20.000			.4710	.0390	.0290	.1180			.2010		.1290				
40.000			.6060	.1090	.0640	.1360			.1410		.1940	.1090	.0760	.0580	.0480
55.000			.6810	.1390	.1220	.1870			.1930		.3840				
70.000			.7400	.2070	.1500	.1680			.1870		.2290	.1660	.0940	.0950	.0980
90.000		1.4820	.7990	.2620	.1780	.1760			.1990		.1790	.0580	.0770	.0860	.0780
120.000			.8480	.3630	.3050	.3110			.4340		.2440	.0260	.0270	.0510	.0600
142.000										.1690					
150.000			.8420	.3670	.3830	.4560			1.0640		.1620	.0410	.0260	.0290	.0490
157.000								1.2860							
162.000									1.1760						
165.000											.0330	.0130	.0360	.0290	.0410
169.000									1.1410						
172.000							1.2790								

ANES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (2) = 2.999 BETAT (3) = -4.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.9030	1.4870	.7140	.3680	.3810	.5170			1.4830		-.0630	-.0090	.0180	.0120	.0110

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0280							-.1560		-.1070
40.000	.0720	.0770		.1570	.1040	.0030	-.0600			-.1040
70.000		.0350	-.0020	.0030	.0360	.0170	.0040	.0470		
90.000		.0510	.0210	.0300	.0720	.0760	.0610	.0720		
105.000				.1380	.1070	.0990	.0540	.0630		
110.000									.1030	
120.000		.0640	.0530	.4050	.2700	.0080	.0270	.0940	.0880	
135.000				.5550	.4650	.0080	.0010	.0520		
150.000		.0570	.0500	.1670	.2990	-.0150	.0260	.1230		
165.000		.0560		.1590	.3190	.2190	.2280	.1420		
180.000		.0170	.0070	.0600						

MACH (2) = 2.999 BETAT (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.9210	.9990	.4180	.0160	.0240	.2660			.1250		.0440	.1540	.1480	.1360	.0500
20.000			.4440	.0250	.0210	.2350			.1520		.0470				
40.000			.5280	.0600	.0210	.1300			.1760		.0940	.0840	.0940	.0460	.0740
55.000			.5730	.0790	.0590	.0910			.1030		.1930				
70.000			.6040	.1270	.0770	.0850			.0900		.1320	.0450	.0460	.0500	.0620
90.000		1.3150	.6550	.1720	.0990	.0990			.1330		.0680	-.0170	-.0240	.0410	.0400
120.000			.7300	.2840	.2270	.2030			.2400		.1150	-.0180	-.0180	-.0270	.0330
142.000										.1240					
150.000			.7740	.3450	.3390	.3900			.9270		.0530	-.0030	-.0090	.0060	.0070
157.000								1.2160							
162.000									1.1110						
165.000											.0420	-.0160	.0000	.0170	.0150
169.000									1.1420						
172.000							1.3110								
180.000	1.9210	1.5140	.7200	.3990	.3870	.4690			1.4950		-.0180	.0030	.0180	.0160	.0190

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0310							-.1070		-.1030
40.000	.0580	.0320		.0820	.0250	-.0390	-.0370			-.1210

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (2) = 2.999 BETAT (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		.0150	-.0110	-.0100	.0210	.0320	.0140	.0140		
90.000		.0390	.0130	.0480	.0570	.0590	.0420	.0270		
105.000				.1070	.0650	.0610	.0400	.0210		
115.000									.0920	
120.000		.0470	.0410	.2260	.1860	.0000	-.0020	.0430	.0470	
135.000				.5320	.4540	.0030	.0240	.0390		
150.000		.0390	.0430	.2040	.3960	.0610	.0940	.1260		
165.000		.0320		.1310	.3230	.2590	.2310	.1360		
180.000		.0170	.0350	.0430						

MACH (2) = 2.999 BETAT (5) = 4.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3264	.3953	.5120
PHI															
.000	1.8990	.9940	.4110	.0480	.0430	.1860			.1360		.0660	.0210	.0460	.0610	.0140
20.000			.4100	.0430	.0440	.1250			.1210		.0260				
40.000			.4520	.0410	.0340	.0810			.0790		.0000	-.0040	-.0170	-.0210	-.0070
55.000			.4580	.0500	.0230	.0600			.0760		.0000				
70.000			.4780	.0800	.0210	.0580			.1620		.0930	-.0030	-.0370	.0230	.0340
90.000		1.1340	.5170	.5680	.0390	.0380			.0680		.0230		-.0210	-.0140	.0000
120.000			.6090	.2080	.1620	.1580			.1660		.0000	-.0020	-.0150	-.0180	-.0060
142.000										.1970					
150.000			.6890	.2990	.2910	.3180			.7820		.0220	.0040	-.0270	-.0140	-.0060
157.000								1.0510							
162.000									1.0780						
165.000											-.0260	-.0370	-.0490	-.0460	-.0040
180.000									.1360						
172.000							1.1980								
180.000	1.8990	1.4980	.7060	.3870	.3820	.4790			1.4670		-.0460	-.0370	-.0180	-.0110	-.0060

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0220							-.1170		-.1070
40.000	.0200	.0040		.0130	-.0230	-.0470	-.0790			-.1510
70.000		.0210	-.0040	-.0070	.0150	.0410	.0140	.0020		
90.000		.0320	.0190	.0510	.0510	.0410	.0260	.0010		
105.000				.0830	.0340	.0430	.0150	.0040		
110.000									.0330	
120.000		.0340	.0350	.1870	.1140	-.0270	-.0260	-.0100	.0140	
135.000				.6770	.4280	.0110	.0070	.0180		
150.000		-.0010	.0120	.1570	.0690	.1050	.1000	.0700		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (2) = 2.999 BETAT (5) = 4.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.-	1.0015	1.0392
PHI										
165.000		-.0180		.0670	.3730	.2000	.1200	.0720		
180.000		.0190	.0090	.0460						

MACH (2) = 2.999 BETAT (6) = 6.580

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.8825	.9980	.4160	.0200	.0380	.2090			.1480		.1330	.1270	.1050	.0430	.0420
25.000			.4000	.0120	.0360	.2090			.1120		.0490				
40.000			.4250	.0110	.0060	.0690			.0910		.0120	.0470	.0290	.0120	.0170
55.000			.4270	.0150	.0020	.0350			.0540		.1030				
70.000			.4270	.0250	.0020	.0310			.0380		.0710	-.0140	-.0510	-.0650	.0270
90.000		1.0830	.4610	.0660	.0150	.0130			.0380		-.0380	-.0890	-.0820	-.0550	-.0650
125.000			.5560	.1760	.1330	.1180			.1220		.0110	-.0760	-.0730	-.0710	-.0620
142.000										.0460					
150.000			.6490	.2770	.2690	.3190			.7350		-.0420	-.0630	-.0390	-.0250	-.0110
157.000								1.0670							
162.000									1.0480						
165.000											-.0530	-.0420	-.0490	-.0110	-.0300
169.000									1.1250						
172.000							1.2270								
180.000	1.8820	1.4820	.7000	.3640	.3760	.4580			1.4510		-.0100	-.0170	.0120	.0090	.0020

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0180							-.1450		-.1180
40.000	-.0430	-.0040		-.0110	-.0430	-.0890	-.1280			-.1130
70.000		.0190	-.0060	-.0070	.0110	.0150	-.0130	-.0060		
90.000		.0210	.0070	.0210	.0460	.0070	-.0150	-.0080		
109.000				.0830	.0360	-.0020	-.0270	-.0120		
110.000									.0180	
120.000		.0200	.0230	.1390	.0340	-.0740	-.0720	-.0310	-.0160	
135.000				.5570	.4160	-.0340	-.0460	-.0210		
150.000		-.0220	-.0340	.0670	.3390	.1150	.0650	.0480		
165.000		-.0390		.0830	.2500	.0780	.0540	.0190		
180.000		-.0170	-.0320	.0370						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (2) = 2.999 BETAT (7) = 8.750

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5126
PHI															
.000	1.8630	1.7000	.4170	.0190	.0340	.1970			.1700		.1160	.0850	.0880	.0330	.0190
20.000			.3910	.0150	.0300	.1700			.1210		.0750				
40.000			.4010	.0090	-.0060	.0800			.0680		-.0040	.0210	-.0200	-.0450	-.0280
55.000			.3930	.0080	-.0090	.0180			.0450		.0020				
70.000			.3810	.0060	-.0180	.0150			.0280		.0000	-.0270	-.0610	-.0270	-.0150
90.000		1.0170	.4060	.0370	-.0050	-.0060			-.0060		-.0090	-.0350	-.0610	-.0720	-.0150
125.000			.5080	.1460	.1090	.0860			.0820		-.0150	-.0930	-.0670	-.0810	-.0810
142.000										.0300					
150.000			.6130	.2590	.2530	.2980			.0660		-.0190	-.0740	-.0470	-.0290	-.0130
157.000								.9910							
162.000									1.0280						
165.000											-.0740	-.0490	-.0130	.0020	-.0050
169.000									1.1070						
172.000							1.1400								
180.000	1.8630	1.4680	.6920	.3770	.3720	.4810			1.4220		.0050	-.0170	.0050	-.0040	-.0280

X/LB	.5873	.6626	.7380	.7869	.8282	.8848	.9262	.9639	1.0015	1.0592
PHI										
.000	-.0030							-.1620		-.1220
40.000	-.0350	-.0170		-.0110	-.0600	-.1300	-.1500			-.1030
70.000		.0120	-.0090	-.0030	-.0080	.0190	-.0180	-.0630		
90.000		-.0060	-.0190	-.0210	.0290	-.1270	-.0520	-.0270		
105.000				.0550	.0180	-.0330	-.0580	-.0230		
110.000									-.0230	
120.000		-.0010	-.0040	.1330	.0180	-.1020	-.0930	-.0390	-.0330	
135.000				.3180	.2860	-.0600	-.1100	-.0720		
150.000		-.0610	-.0630	.0570	.1860	.0810	.0160	.0260		
165.000		-.0580		.0500	.1370	.0030	-.0210	-.0340		
180.000		-.0660	-.0550	-.0210						

MACH (3) = 3.502 BETAT (1) = -6.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1561	.1732	.1958	.2259	.2711	.3260	.3953	.5126
PHI															
.000	2.0800	1.9700	.4410	.0550	.0410	.1180			.2070		.1320	.1270	.1010	.0660	.0470
20.000			.5460	.0730	.0270	.1140			.2110		.2070				
40.000			.7490	.1350	.1110	.2320			.1270		.2710	.1590	.1110	.0610	.0650
55.000			.8700	.2610	.2190	.2190			.2700		.4260				
70.000			.9750	.3330	.2600	.2530			.2590		.3190	.2700	.1790	.1650	.1520
90.000		1.7720	1.0520	.4040	.2920	.2870			.2930		.2940	.1460	.1580	.1510	.1310
125.000			1.0630	.4830	.4140	.4410			.5880		.3010	.1930	.0660	.1120	.1040

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (3) = 3.502 BETAT (1) = -8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
142.000										.2970					
150.000			.9960	.4830	.4460	.5290			1.2540		.1100	.1020	.0820	.0580	.0780
157.000								1.4590							
162.000									1.3630						
165.000											.0910	.0860	.0920	.0560	.0760
169.000									1.2590						
172.000							1.3110								
180.000	2.0860	1.6210	.7720	.4190	.3920	.4430			1.5770		.0320	.0260	.0140	-.0210	-.0170

X/LB	.5075	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0110							-.0760		-.0790
40.000	.0810	.1170		.2600	.2120	.1050	.0710			-.0460
70.000		.0760	.0360	.0350	.0720	.0850	.0710	.0830		
90.000		.0970	.0590	.0620	.1170	.1340	.1370	.1390		
105.000				.1810	.1730	.1350	.1380	.1310		
115.000									.1510	
125.000		.0830	.0720	.5370	.4070	.1170	.1290	.1470	.1440	
135.000				.5210	.5210	.0650	.0270	.0670		
150.000		.0760	.0690	.1590	.2510	-.0090	.0230	.0980		
165.000		.0850		.1620	.2770	.1620	.2180	.1500		
180.000		-.0440	-.0380	-.0250						

MACH (3) = 3.502 BETAT (2) = -6.520

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	2.1030	1.0720	.4310	.0480	.0390	.1280			.1740		.0860	.1230	.0870	.0670	.0340
20.000			.5200	.0680	.0350	.1110			.1850		.1780				
40.000			.7010	.0680	.0840	.2160			.1330		.2870	.1490	.0940	.0760	.0700
55.000			.8060	.1420	.1730	.1840			.2230		.2440				
70.000			.8920	.2580	.2090	.2040			.2060		.2600	.1320	.1420	.1340	.1220
90.000		1.6990	.9650	.3500	.2400	.2350			.2290		.2260	.0880	.0650	.1230	.1060
120.000			.9960	.4430	.3650	.3850			.4920		.2460	.0670	.0380	.0590	.0780
142.000										.2510					
150.000			.9540	.4430	.4190	.4890			1.1780		.0820	.0680	.0580	.0360	.0530
157.000								1.4160							
162.000									1.3160						
165.000											.0590	.0440	.0700	.0360	.0450
169.000									1.2510						
172.000							1.3320								

AMES 87-707 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RB\B11)

MACH (3) = 3.502 BETAT (2) = -6.520

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	2.1130	1.6290	.7740	.4420	.3910	.4560			1.6030		.0120	.0140	.0080	.0140	.0000
X/LB	.5073	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0080							-.0850		-.0920					
40.000	.0500	.0840		.1950	.1570	.0620	.0300			-.1170					
70.000		.0570	.0150	.0170	.0480	.0770	.0480	.0620							
90.000		.0720	.0370	.0390	.0820	.1100	.1210	.1130							
105.000				.1500	.1370	.1110	.1190	.1070							
110.000									.1280						
120.000		.0680	.0550	.5220	.3330	.1120	.0690	.1180	.1120						
139.000				.5470	.4890	.0570	.0230	.0540							
150.000		.0680	.0340	.1490	.2540	.0210	.0150	.1240							
165.000		.1640		.1380	.2680	.1890	.2340	.1460							
180.000		-.0120	-.0300	.0240											

MACH (3) = 3.502 BETAT (3) = -6.520

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	2.1080	1.6480	.4280	.0480	.0390	.1180			.1580		.0690	.0940	.1240	.0630	.0410
20.000			.4990	.0320	.0370	.1220			.1850		.1120				
40.000			.6330	.0910	.0650	.1580			.1250		.2130	.1840	.0680	.0720	.0440
55.000			.7420	.1040	.1370	.1460			.1910		.1900				
70.000			.8120	.1960	.1690	.1640			.1660		.2070	.1190	.0910	.1110	.1530
90.000		1.8170	.8850	.2990	.1980	.1030			.1790		.1810	.0720	.0420	.0520	.0470
120.000			.9320	.3820	.3250	.3310			.4540		.2110	.1430	.0700	.0570	.0580
142.000										.2170					
150.000			.9160	.4110	.3950	.4550			-.1110		.0710	.0470	.0220	.0220	.0150
157.000								-.3640							
162.000									-.2790						
165.000											.0510	.0310	.0520	.0210	.0310
169.000									-.2460						
172.000							1.3230								
180.000	2.1080	1.6420	.7770	.4110	.3950	.4610			1.6160		.0160	.0200	.0110	.0230	.0130
X/LB	.5073	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0090							-.0830		-.0910					
40.000	.0490	.0630		.1900	.1250	.0550	.0020			-.0720					

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (3) = 3.502 BETAT (3) = -4.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		.0415	.0550	.0560	.0290	.0520	.0290	.0430		
90.000		.0570	.0260	.0260	.0640	.0930	.0930	.0860		
105.000				.1340	.1130	.0900	.0880	.0790		
110.000									.1190	
120.000		.0620	.0530	.4560	.2880	.0920	.0460	.0690	.0900	
135.000				.5330	.4740	.0300	.0250	.0500		
150.000		.0580	.0500	.1400	.2760	.0070	.0260	.0970		
165.000		.0530		.1330	.2740	.2170	.2150	.1470		
180.000		.0120	.0100	.0510						

MACH (3) = 3.502 BETAT (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	2.1220	1.0570	.4220	.0440	.0390	.1070			.1480		.0580	.0690	.1290	.0990	.0650
25.000			.4590	.0410	.0330	.0950			.1690		.0680				
40.000			.5610	.0410	.0250	.0730			.1210		.0910	.1150	.0870	.0650	.0610
55.000			.6190	.0970	.0720	.0700			.0940		.1240				
70.000			.6640	.1560	.0930	.0990			.0830		.1120	.0270	.0050	.0540	.0580
90.000		1.4490	.7260	.2040	.1210	.1140			.1160		.0840	-.0010	-.0150	-.0060	.0420
120.000			.8020	.3140	.2450	.2220			.2670		.1310	.0420	-.0150	-.0130	.0080
142.000										.1580					
150.000			.8400	.3730	.3490	.3840			.9650		.0460	.0110	.0040	.0010	.0090
157.000								1.2850							
162.000									2.2220						
165.000											.0130	-.0030	.0130	.0130	.0200
169.000									1.2360						
172.000							1.3650								
180.000	2.1220	1.6610	.7840	.4230	.3940	.4600			1.6130		-.0040	.0180	.0130	.0230	.0230

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0420							-.0690		-.0870
40.000	.0610	.0500		.0880	.0450	-.0320	-.0400			-.0890
70.000		.0180	-.0110	-.0120	.0080	.0060	-.0030	.0130		
90.000		.0370	.0150	.0190	.0560	.0490	.0210	.0300		
105.000				.1180	.0830	.0420	.0150	.0250		
110.000									.0700	
120.000		.0440	.0390	.1890	.1840	.0030	-.0140	.0110	.0370	
135.000				.4260	.4500	.0040	-.0140	.0370		
150.000		.0270	.0350	.1670	.3490	.0260	.0340	.1690		

AMES 87-707 IA9 02A + 93 + T9 ORBITER FUSELAGE (RBNS11)

MACH (3) = 3.502 BETAT (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
155.000		.0190		.1150	.2580	.1890	.1600	.1260		
180.000		.0170	.0130	.0260						

MACH (3) = 3.502 BETAT (5) = 4.470

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3214	.3953	.5125
PHI															
.000	2.1120	1.0570	.4120	.1440	.0470	.1090			.1570		.0660	.0930	.1070	.0610	.0340
20.000			.0720	.0310	.0480	.0960			.1410		.0420				
40.000			.4640	.0310	.0210	.0830			.0760		.0440	.0220	.0510	.0360	.0250
55.000			.5110	.0330	.0280	.0600			.0640		.0770				
70.000			.5250	.0810	.0390	.0580			.0320		.0680	-.0070	-.0330	-.0070	.0280
90.000		1.2690	.5700	.1210	.0590	.0610			.0490		.0430	-.0510	-.0530	-.0430	-.0330
125.000			.6640	.2320	.1760	.1670			.1590		.0800	-.0370	-.0430	-.0460	-.0400
142.000										.1030					
150.000			.7490	.3240	.3040	.3490			.8140		.0260	-.0340	-.0170	-.0160	-.0060
157.000								1.1990							
162.000									1.1710						
165.000											-.0210	-.0240	.0070	.0060	.0490
169.000									1.2250						
172.000							.3080								
180.000	2.1020	1.6480	.7690	.4110	.3920	.4540			1.5860		.0490	.0150	.0490	.0190	.0110

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0790							-.0950		-.0870
40.000	.0270	.0110		.0240	-.0110	-.0270	-.0580			-.0990
70.000		.0060	-.0130	-.0100	-.0020	.0240	-.0450	.0000		
90.000		.0140	.0040	.0230	.0360	.0260	-.0220	.0080		
105.000				.0670	.1200	.0270	.0440	-.0010		
110.000									.0730	
120.000		.0140	.0150	.1520	.0730	-.0240	-.0290	-.0130	.0020	
135.000				.6010	.3650	-.0250	.0010	.0180		
150.000		-.0490	-.0100	.1160	.4620	.0720	.0580	.0530		
165.000		-.0170		.0100	.2780	.1490	.0680	.0620		
180.000		.0060	.0060	.0410						

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB11)

MACH (3) = 3.502 BETAT (6) = 6.69

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	2.0750	1.0370	.4180	.0450	.0340	.1230			.1680		.0800	.1190	.0860	.0630	.0330
25.000			.4130	.0290	.0300	.1160			.1330		.0420				
40.000			.4490	.0290	-.0070	.0710			.0990		.0190	.0070	.0330	-.0080	-.0080
55.000			.4590	.0290	.0050	.0380			.0450		.0700				
70.000			.4540	.0550	.0150	.0380			.0110		.0300	-.0240	-.0450	-.0250	.0160
90.000		1.1830	.5230	.0470	.0310	.0330			.0070		-.0190	-.0670	-.0670	-.0590	-.0150
120.000			.6410	.1950	.1470	.1290			.1240		.0330	-.0530	-.0560	-.0580	-.0540
142.000										.0750					
150.000			.6970	.2970	.2740	.3150			.7420		.0120	-.0430	-.0280	-.0220	-.0030
157.000								1.1250							
162.000									1.1470						
165.000											-.0430	-.0310	.0020	-.0050	-.0210
169.000									1.2030						
172.000							1.2190								
180.000	2.0750	1.6260	.7580	.4030	.3810	.4320			1.5660		-.0010	.0080	.0010	.0130	-.0050

X/LB	.5873	.6626	.7330	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0030							-.1210		-.0900
40.000	-.0110	-.0120		-.0060	-.0220	-.0900	-.1210			-.0940
70.000		.0050	-.0110	-.0070	-.0080	-.0120	-.0340	-.0040		
90.000		.0000	-.0090	-.0030	.0270	-.0230	-.0380	-.0070		
105.000				.0570	.0250	-.0210	-.0500	-.0130		
110.000									.0560	
120.000		-.0070	.0000	.1090	.0260	-.0770	-.0730	-.0170	-.0050	
135.000				.4560	.3130	-.0770	-.0750	-.0320		
150.000		-.0180	-.0290	.0680	.3100	.0510	.0280	.0430		
165.000		-.0290		.0320	.1800	.0410	-.0010	.0080		
180.000		-.0070	-.0330	.0240						

MACH (3) = 3.502 BETAT (7) = 8.900

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	2.0490	1.0550	.4250	.0460	.0360	.1100			.1920		.1250	.1280	.0940	.0570	.0410
25.000			.4020	.0300	.0320	.0880			.1280		.0520				
40.000			.4180	.0270	-.0100	.0510			.0680		.0000	.0050	-.0190	-.0520	-.0450
55.000			.4190	.0270	-.0070	.0250			.0320		.0590				
70.000			.4070	.0250	-.0010	.0190			.0080		.0140	-.0280	-.0440	-.0280	-.0010
90.000		1.0790	.4380	.0590	.0130	.0130			-.0180		-.0310	-.0690	-.0690	-.0670	-.0280
120.000			.5450	.1650	.1180	.1140			.0920		.0130	-.0540	-.0700	-.0710	-.0660

AMES 87-707 IA9 32A + S3 + T9 ORBITER FUSELAGE (RBM311)

MACH (3 = 3.500 BETAT (7) = 8.900

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
142.000										.0521					
151.000			.6550	.2760	.2550	.2850			.6640		.0480	-.0450	-.0350	-.0230	-.0060
157.000								1.0290							
162.000									1.1250						
165.000											-.0460	.0270	-.0070	-.0260	-.0410
169.000									.1790						
172.000							1.1380								
180.000	.1490	1.6060	.7480	.3950	.3750	.4220			.5220		.0150	.0190	-.0040	-.0180	-.0270

X/LB	.0073	.6626	.7320	.7469	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0470							-.1410		-.1210
40.000	-.1480	-.0350		-.0610	.0440	.1040	.1330			-.0850
70.000		.0010	-.0120	-.0130	.0110	.0040	.0290	.0640		
90.000		-.0160	-.0280	-.0250	.0150	-.0460	-.0610	.0230		
115.000				.0320	.0480	-.0500	-.0690	-.0220		
130.000									.0170	
125.000		-.0230	-.0110	.0950	.0490	.0680	.1010	.0410	-.0280	
135.000				.2580	.2220	-.0950	-.0970	-.0550		
150.000		-.1480	.0500	.0210	.1190	.0400	-.0640	.0250		
165.000		-.0440		.0060	.1060	.0110	.0460	-.0330		
180.000		-.0500	-.0450	-.0370						

AMES 87-7D7 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB12) (15 MAY 73)

REFERENCE DATA

SREF = 2.421D SQ.FT. XMRP = 28.53DD INCHES
LREF = 39.849D INCHES YMRP = .DDDD INCHES
BREF = 39.849D INCHES ZMRP = .DDDD INCHES
SCALE = .03DD SCALE

PARAMETRIC DATA

ALPHAT = -4.DDD ORBINC = .5DD
RUDDER = -15.DDD ELEVON = .DDD
RUDFLR = .DDD

MACH (1) = 2.49D BETAT (1) = -8.42D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.DDDD	.DD75	.D188	.D339	.D6D2	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3206	.3953	.5125
PHI															
.DDD	1.585D	.917D	.417D	.D21D	.D5DD	.318D			.142D		.D72D	.D86D	.D29D	-.DD9D	-.D49D
2D.DDD			.47DD	.D48D	.D58D	.383D			.191D		.D85D				
4D.DDD			.647D	.134D	.126D	.354D			.255D		.126D	.D7DD	.D74D	.D22D	.D7DD
55.DDD			.734D	.224D	.184D	.538D			.428D		.323D				
7D.DDD			.78DD	.247D	.2D7D	.3DDD			.5D3D		.4D1D	.163D	.D62D	.D66D	.D74D
9D.DDD		1.344D	.799D	.282D	.224D	.3DDD			.422D		.433D	.151D	.D75D	.D5DD	.D58D
12D.DDD			.787D	.336D	.3D7D	.359D			.5D5D		.321D	.1D7D	.D58D	.D48D	.D35D
142.DDD										.177D					
15D.DDD			.725D	.3D7D	.326D	.415D			.981D		.D67D	.D42D	.D61D	.D55D	.D23D
157.DDD								1.128D							
162.DDD									.97DD						
165.DDD											-.DD5D	.D37D	.D79D	.D66D	.D27D
169.DDD									.858D						
172.DDD							1.D46D								
18D.DDD	1.585D	1.179D	.547D	.283D	.281D	.422D			1.D94D		-.D62D	-.D57D	-.D36D	-.D81D	-.1D1D

X/LB	.5875	.6626	.738D	.7969	.8283	.8848	.9262	.9639	1.DD15	1.D392
PHI										
.DDD	-.D17D							-.143D		-.129D
4D.DDD	.121D	.D92D		.23DD	.14DD	.D97D	-.D25D			-.126D
7D.DDD		.D22D	.DD4D	.D12D	.D63D	.D7DD	.D4DD	.D45D		
9D.DDD		.D38D	.D15D	.D8DD	.133D	.115D	.D75D	.D54D		
1D5.DDD				.168D	.19DD	.137D	.D73D	.D45D		
1*D.DDD									.D41D	
12D.DDD		.D29D	.D17D	.39DD	.341D	.138D	.D77D	.D71D	.D55D	
135.DDD				.375D	.371D	.D32D	.DDDD	.D15D		
15D.DDD		.D14D	.DD9D	.1D7D	.149D	-.D59D	.D17D	.D99D		
165.DDD		.D17D		.12BD	.226D	.15DD	.2D9D	.1D3D		
18D.DDD		-.134D	-.D91D	-.D43D						

AMES 87-707 IA9 CBA + SS + T9 ORBITER FUSELAGE (RBNB12)

MACH (1) = 2.498 BETAT (2) = -6.390

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5690	.9300	.4490	.0350	.0550	.2200			.1480		.0880	.0960	.0360	.0070	-.0380
20.000			.4930	.0630	.0740	.2890			.1930		.0830				
40.000			.6160	.1310	.1070	.3340			.2560		.1130	.0600	.0370	.0050	.0620
55.000			.6760	.1870	.1580	.2710			.3910		.2940				
70.000			.7140	.2010	.1650	.2480			.3400		.3720	.1410	.0430	.0470	.0540
90.000		1.2860	.7360	.2380	.1780	.2520			.3050		.3780	.1350	.0590	.0330	.0360
120.000			.7410	.2990	.2650	.3110			.4110		.2060	.0750	.0550	.0340	.0200
142.000										.1340					
150.000			.7020	.2900	.3070	.3910			.9270		.0490	.0670	.0290	.0350	.0190
157.000								1.0990							
162.000									.9370						
165.000											-.0250	.0010	.0200	.0490	.0220
169.000									.8490						
172.000							1.0690								
180.000	1.5690	1.1850	.5490	.2830	.2790	.4030			1.1090		-.0630	-.0600	-.0340	-.0160	-.0640

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0210							-.1420		-.1170
40.000	.1030	.0730		.1830	.1050	.0630	-.0380			-.1380
70.000		.0060	-.0190	-.0090	.0480	.0570	.0290	.0250		
90.000		.0180	-.0040	.0530	.0970	.0970	.0600	.0350		
105.000				.1230	.1470	.0980	.0580	.0270		
110.000									.0330	
120.000		.0190	.0070	.3550	.2630	.0990	.0650	.0520	.0410	
135.000				.4110	.3640	.0310	.0490	.0220		
150.000		.0090	.0010	.1110	.1850	-.0320	.0320	.0940		
165.000		.0080		.1240	.2490	.1980	.2030	.0910		
180.000		-.0860	-.0710	.0180						

MACH (1) = 2.498 BETAT (3) = -4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5820	.9220	.4490	.0190	.0330	.1680			.1170		.1150	.1220	.0770	.0450	-.0280
20.000			.4890	.0490	.0480	.0940			.2040		.0940				
40.000			.5820	.1140	.0690	.0840			.2640		.1010	.0650	.0240	.0090	.0840
55.000			.6170	.1500	.1240	.1990			.3390		.2670				
70.000			.6440	.1540	.1290	.1950			.2180		.3420	.1200	.0280	.0300	.0330
90.000		1.2280	.6690	.1850	.1320	.1920			.2190		.3070	.1170	.0450	.0180	.0170
120.000			.6900	.2620	.2260	.2660			.3530		.1580	-.0020	.0530	.0230	.0070

AMES 87-707 IA9 CEA + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (1) = 2.498 BETAT (3) = -4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1660					
150.000			.6730	.2720	.2880	.3590			.8730		.0330	-.0170	-.0130	.0220	.0170
157.000								1.0510							
162.000									.8980						
165.000											-.0400	-.0310	-.0090	.0270	.0170
169.000									.8650						
172.000							1.0560								
180.000	1.5820	1.2000	.5540	.2850	.2830	.4090			1.1210		-.0680	-.0590	-.0340	-.0250	-.0150
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0320							-.1360		-.1150					
40.000	.0680	.0420		.1360	.0620	.0200	-.0590			-.1490					
70.000		-.0110	-.0280	-.0230	.0200	.0300	.0080	.0080							
90.000		.0040	-.0150	.0280	.0570	.0770	.0420	.0140							
105.000				.1040	.1080	.0930	.0410	.0050							
110.000									.0050						
120.000		.0120	.0000	.3370	.2220	.0930	.0410	.0360	.0240						
135.000				.4350	.3670	.0010	.0130	.0410							
150.000		.0020	.0020	.1360	.2380	-.0040	.0650	.1200							
165.000		.0010		.1350	.2820	.2130	.2020	.0760							
180.000		-.0340	-.0260	.0790											

MACH (1) = 2.498 BETAT (4) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5820	.8980	.3680	.0120	.0310	.2130			.0950		.0830	.1730	.1160	.0410	-.0300
20.000			.3910	-.0090	.0290	.2130			.1110		.0780				
40.000			.4690	.0250	.0260	.1110			.1540		.1160	.0600	.0710	.0250	.0270
55.000			.4950	.0620	.0250	.1530			.1240		.2220				
70.000			.5070	.0680	.0360	.1030			.1220		.2580	.0820	.0400	.0000	.0040
90.000		1.0920	.5370	.1900	.0500	.0980			.1400		.1120	.0610	.0190	-.0120	-.0030
120.000			.5820	.1870	.1540	.1120			.1810		.0690	-.0600	-.0370	.0010	-.0030
142.000										.0350					
150.000			.6060	.2330	.2450	.3020			.7510		-.0100	-.0620	-.0330	-.0210	.0130
157.000								.9730							
162.000									.8240						
165.000											-.0680	-.0750	-.0420	-.0270	.0160
169.000									.8560						
172.000							1.0640								

AMES 67-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (1) = 2.498 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
180.000	1.5820	1.2000	.5490	.2850	.2830	.3650			1.1140		-.0770	-.0470	-.0430	-.0230	.0080

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.1070		-.0880
40.000	.0070	.0110		.0330	-.0110	-.0510	-.0920			-.1160
70.000		-.0200	-.0400	-.0390	-.0080	.0000	-.0120	-.0160		
90.000		-.0070	-.0240	.0280	.0200	.0350	.0190	-.0110		
105.000				.0750	.0430	.0400	.0020	-.0180		
110.000									.0710	
120.000		.0070	.0030	.2180	.1440	-.0200	-.0640	.0130	.0130	
135.000				.4510	.3810	-.0180	-.0240	.0440		
150.000		.0130	.0110	.1850	.3380	.0440	.0910	.0990		
165.000		.0180		.1730	.3020	.2160	.1860	.0590		
180.000		.0210	.0180	.0220						

MACH (1) = 2.498 BETAT (5) = 4.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.5730	.9090	.4310	.0180	.0240	.1880			.1220		.1180	.1310	.0690	.0440	-.0260
20.000			.4160	.0150	.0280	.1590			.0840		.1160				
40.000			.4240	.0230	.0180	.0550			.1060		.1150	.1140	.0530	-.0110	-.0120
55.000			.4050	.0170	.0060	.0610			.0750		.1590				
70.000			.3920	.0460	-.0110	.0440			.0630		.0990	.0350	-.0250	-.0140	-.0120
90.000		.9990	.4120	.0280	-.0110	.0370			.0660		.0250	-.0220	-.0260	-.0230	-.0130
120.000			.4750	.1240	.0900	.0870			.1090		-.0240	-.1020	-.1000	-.0370	-.0420
142.000										-.0110					
150.000			.5390	.1980	.2040	.2440			.6370		-.0490	-.0950	-.0750	-.0570	-.0490
157.000								.8860							
162.000									.7900						
165.000											-.0950	-.0900	-.0540	-.0370	-.0410
169.000									.8520						
172.000							1.0380								
180.000	1.5730	1.2020	.5480	.2770	.2780	.3600			1.1020		-.0730	-.0550	-.0370	-.0330	-.0210

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0370							-.1400		-.1150
40.000	-.0220	.0020		-.0400	-.0670	-.1030	-.1380			-.1980

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RUN512)

MACH (1) = 2.490 BETAT (5) = 4.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
70.000		-.0240	-.0490	-.0430	-.0200	-.0190	-.0400	-.0440		
90.000		-.0050	-.0290	.0190	.0010	.0020	-.0280	-.0390		
105.000				.0370	-.0070	.0030	-.0340	-.0480		
110.000									.0320	
120.000		-.0010	-.0030	.1650	.0690	-.0770	-.0680	-.0330	-.0190	
135.000				.3980	.3630	-.0310	-.0380	-.0170		
150.000		.0110	.0450	.2080	.4660	.0670	.0020	.0380		
165.000		-.0190		.0490	.4330	.1090	.0950	.0410		
180.000		-.0320	-.0270	.0680						

MACH (1) = 2.490 BETAT (6) = 6.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1508	.1581	.1732	.1958	.2259	.2711	.3210	.3993	.5120
PHI															
.000	1.5650	.9040	.3980	.0210	.0410	.2290			.1470		.0870	.0870	.0250	-.0090	-.0440
20.000			.3840	.0130	.0280	.1810			.1030		.0840				
40.000			.3750	.0460	.0120	.0470			.0630		.0340	.0840	.0180	-.0430	-.0340
55.000			.3550	-.0130	-.0080	.0420			.0530		.0810				
70.000			.3330	-.0270	-.0190	.0180			.0510		.0710	-.0300	-.0280	-.0290	-.0280
90.000		.8990	.3540	-.0040	-.0300	.0140			.0240		.0410	-.0680	-.0790	-.0330	-.0290
120.000			.4260	.0940	.0620	.0570			.0800		-.0350	-.1190	-.1220	-.0770	-.0110
142.000										-.0340					
150.000			.5030	.1770	.1850	.2350			.0850		-.0630	-.1110	-.0870	-.0740	-.0410
157.000								.0820							
162.000									.7710						
165.000											-.1120	-.0910	-.0650	-.0840	-.0680
169.000									.8490						
172.000							1.0090								
180.000	1.5650	1.1940	.5400	.2700	.2790	.3610			1.0910		-.0740	-.0740	-.0360	-.0230	-.0720

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0210							-.1440		-.1150
40.000	-.0340	-.0130		-.0360	-.0980	-.1320	-.1520			-.1120
70.000		-.0190	-.0430	-.0440	-.0250	-.0180	-.0450	-.0480		
90.000		-.0030	-.0240	.0050	-.0070	-.0080	-.0450	-.0470		
105.000				.0360	-.0240	-.0140	-.0430	-.0520		
110.000									.0280	
120.000		-.0080	-.0140	.1700	.0390	-.0920	-.0610	-.0680	-.0360	
135.000				.5940	.3790	-.0520	-.0610	-.0520		
150.000		-.0420	-.0500	.0820	.2630	.0730	.0540	.0300		

ANES 87-707 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (1) = 2.498 BETAT (6) = 6.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0610		.0630	.3150	.1120	.0450	.0040		
180.000		-.0680	-.0670	.0090						

MACH (1) = 2.498 BETAT (7) = 8.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3234	.3993	.5121
PHI															
.000	1.5560	.9120	.3660	.0090	.0460	.2930			.1320		.0680	.0870	.0290	-.0440	-.0870
20.000			.3370	-.0010	.0220	.2210			.1070		.0430				
40.000			.3350	-.0270	-.0070	.0720			.0270		-.0270	-.0410	-.0590	-.0840	-.0790
55.000			.3200	-.0450	-.0320	.0280			.0060		.0040				
70.000			.2920	-.0500	-.0400	-.0490			.0070		.0750	-.0460	-.0480	-.0420	-.0490
90.000		.8480	.3040	-.0290	-.0510	-.0110			-.0070		-.0320	-.0490	-.0830	-.0490	-.0240
125.000			.3850	.0630	.0460	.0330			.0280		-.0650	-.1340	-.1380	-.0930	-.0250
142.000										-.0510					
150.000			.4680	.1640	.1680	.2000			.0270		-.0780	-.1190	-.0970	-.0640	-.0650
157.000								.7950							
162.000									.7660						
165.000											-.1290	-.0950	-.0720	-.0680	-.1110
169.000									.8390						
172.000							.9500								
180.000	1.5560	1.1840	.5320	.2680	.2760	.3790			1.0750		-.0620	-.0680	-.0440	-.0710	-.1120

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0820							-.1440		-.1220
40.000	-.0820	-.0190		-.0830	-.1050	-.1500	-.1600			-.1220
70.000		-.0140	-.0400	-.0450	-.0240	-.0160	-.0530	-.0510		
90.000		-.0080	-.0290	-.0010	.0010	-.0140	-.0520	-.0590		
105.000				.0420	-.0210	-.0130	-.0570	-.0610		
110.000									-.0140	
120.000		-.0180	-.0210	.1920	.0290	-.1070	-.1030	-.0810	-.0660	
135.000				.3640	.3740	-.0570	-.0800	-.0690		
150.000		-.1080	-.0950	.0690	.0430	.0250	-.0690	.0210		
165.000		-.1030		.0350	.1420	.0690	-.0220	.0730		
180.000		-.1370	-.0950	-.0480						

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AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (2) = 2.999 BETAT (1) = -8.500

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0060	.9150	.3690	.1460	.0270	.0940			.1840		.1050	.0760	.0750	.0110	-.0260
20.000			.4710	.0440	.0290	.1090			.3110		.1200				
40.000			.6480	.1480	.0650	.1630			.3230		.1830	.1170	.0450	.0530	.0380
55.000			.7410	.1890	.1780	.2290			.3950		.3590				
70.000			.8060	.2660	.2010	.2120			.2590		.4320	.2170	.1040	.0980	.0830
90.000		1.4420	.8430	.3070	.2180	.2280			.2410		.2980	.1960	.1180	.0830	.0660
120.000			.8190	.3530	.2980	.3360			.4630		.2250	.0600	.0730	.0750	.0470
142.000										.2040					
150.000			.7480	.3210	.3130	.3870			.9920		.0710	.0480	.0320	.0530	.0410
157.000								1.1410							
162.000									1.0510						
165.000											.0320	.0350	.0430	.0450	.0470
169.000									.9510						
172.000							1.0340								
180.000	1.0060	1.2510	.5660	.2850	.2700	.3560			1.2060		-.0260	-.0310	-.0210	-.0530	-.0710

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0350							-.0990		-.1030
40.000	.0530	.0910		.2290	.1840	.1240	.0480			-.0870
70.000		.0240	-.0120	-.0100	.0395	.0710	.0480	.0400		
90.000		.0410	.0100	.0250	.0840	.1110	.0990	.0770		
105.000				.1160	.1180	.1140	.1070	.0700		
115.000									.1020	
120.000		.0320	.0190	.3630	.2990	.0950	.1030	.0930	.0780	
135.000				.3750	.3790	.0510	.0480	.0360		
150.000		.0230	.0180	.0970	.1550	-.0340	-.0060	.0670		
165.000		.0290		.1050	.1930	.1260	.1890	.0960		
180.000		-.1040	-.0850	-.0630						

MACH (2) = 2.999 BETAT (2) = -6.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0060	.9080	.3790	.0090	.0070	.0840			.1480		.0970	.0820	.0830	.0840	-.0170
20.000			.4480	.0340	.0270	.0640			.2230		.1240				
40.000			.5990	.1140	.0760	.1460			.1730		.1680	.1060	.0450	.0320	.0240
55.000			.6780	.1490	.1370	.1920			.2040		.3320				
70.000			.7350	.2190	.1580	.1720			.1980		.3540	.1810	.0820	.0790	.0840
90.000		1.3770	.7760	.2595	.1730	.1870			.2030		.2070	.1380	.0990	.0840	.0470
120.000			.7690	.3180	.2610	.2950			.3870		.1850	.0320	.0190	.0630	.0300

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (2) = 2.999 BETAT (2) = -6.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1650					
150.000			.7190	.3020	.2930	.3620			.9370		.0540	.0250	.0090	.0190	.0270
157.000								1.1170							
162.000									1.0100						
165.000											.0170	.0050	.0210	.0080	.0330
169.000									.9430						
172.000							1.0620								
180.000	1.8980	1.2630	.3670	.2880	.2700	.3450			1.2220		-.0300	-.0350	-.0270	-.0230	-.0400

X/LB	.5873	.6826	.7580	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0380							-.1130		-.1190
40.000	.0210	.0510		.1850	.1400	.0770	.0130			-.0980
70.000		.0050	-.0290	-.0270	.0150	.0350	.0150	.0120		
90.000		.0190	-.0090	-.0010	.0420	.0720	.0660	.0490		
105.000				.0890	.0810	.0720	.0760	.0430		
110.000									.0810	
120.000		.0170	.0050	.3310	.2470	.0490	.0690	.0610	.0560	
135.000				.3860	.3590	.0120	-.0050	.0150		
150.000		.0680	.0050	.0930	.1680	-.0330	-.0040	.0530		
165.000		.0130		.0930	.1940	.1540	.1760	.0920		
180.000		-.0760	-.0810	-.0240						

MACH (2) = 2.999 BETAT (3) = -4.270

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7150	.9070	.3780	.1070	.0680	.0960			.1190		.0520	.0680	.0790	.0310	.0420
20.000			.4280	.0240	.0070	.0870			.1770		.1090				
40.000			.5550	.0880	.0480	.1490			.1200		.1720	.0920	.0490	.0300	.0180
55.000			.6240	.0880	.1000	.1500			.1600		.3160				
70.000			.6700	.1750	.1170	.1330			.1510		.2110	.1560	.0670	.0540	.0430
90.000		1.3180	.7110	.2150	.1370	.1470			.1600		.1550	.0420	.0800	.0440	.0320
120.000			.7240	.2830	.2290	.2480			.3270		.1490	.0030	-.0110	.0490	.0210
142.000										.1350					
150.000			.6980	.2890	.2800	.3340			.8820		.0380	.0060	-.0080	-.0080	.0160
157.000								1.0780							
162.000									.9800						
165.000											.0000	-.0180	.0020	-.0080	.0190
169.000									.9480						
172.000							1.0580								

AMES 67-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (2) = 2.999 BETAT (3) = -4.270

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.7190	1.2840	.5750	.2910	.2720	.3490			1.2410		-.0360	-.0370	-.0230	-.0180	-.0260
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0170							-.1020		-.1050					
40.000	.0030	.0440		.1390	.0850	.0340	-.0160			-.1070					
70.000		-.0110	-.0420	-.0390	-.0130	.0110	-.0070	-.0060							
90.000		.0030	-.0230	-.0170	.0130	.0480	.0460	.0290							
105.000				.0640	.0490	.0490	.0500	.0230							
110.000									.0220						
125.000		.0090	-.0030	.3140	.2050	.0180	.0180	.0450	.0410						
135.000				.4000	.3470	.0170	-.0110	.0480							
150.000		.0030	-.0010	.0950	.1900	-.0210	.0090	.0650							
165.000		.0050		.0830	.2070	.1730	.1830	.0850							
180.000		-.0380	-.0460	.0260											

MACH (2) = 2.999 BETAT (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7370	.9120	.3730	.0040	.0490	.2170			.1150		.0520	.1120	.1380	.1540	.0190
20.000			.3980	.0110	.0080	.1710			.1420		.0420				
40.000			.4790	.0420	.0080	.1050			.1380		.1520	.07 5	.0620	.0300	.0080
55.000			.5160	.0630	.0400	.0690			.0830		.1370				
75.000			.5410	.1000	.0590	.0680			.0710		.1170	.0310	.0360	.0200	.0170
90.000		1.1820	.5780	.1340	.0670	.0740			.0860		.0570	-.0230	-.0170	.0230	.0460
125.000			.6170	.2160	.1620	.1430			.1830		.0760	-.0360	-.0420	-.0370	.0060
142.000										.0810					
150.000			.6370	.2560	.2440	.2840			.7620		.0160	-.0300	-.0370	-.0260	-.0130
157.000								1.0150							
162.000									.9280						
165.000											-.0250	-.0440	-.0290	-.0160	-.0190
169.000									.9480						
172.000							1.0790								
180.000	1.7370	1.3080	.5830	.2940	.2810	.3390			1.2480		-.0450	-.0260	-.0200	-.0120	-.0190
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0210							-.0930		-.0970					
40.000	.0160	-.0010		.0630	.0120	-.0340	-.0430			-.1180					

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (2) = 2.999 BETAT (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0240	-.0480	-.0490	-.0270	-.0180	-.0280	-.0220		
90.000		-.0490	-.0330	-.0195	-.0030	.0220	.0110	-.0040		
105.000				.0545	.0240	.0230	.0080	-.0080		
110.000									.0520	
120.000		.0040	-.0010	.2060	.1320	-.0120	-.0290	.0080	.0160	
135.000				.3530	.3630	-.0030	-.0060	.0190		
150.000		.0050	.0060	.1410	.2860	.0320	.0610	.0850		
165.000		.0040		.1390	.2370	.1920	.1660	.0710		
180.000		.0010	.0110	.0170						

MACH (2) = 2.999 BETAT (5) = 4.380

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.7120	.9080	.3730	.0210	.0060	.0810			.1150		.0560	.0830	.0710	.0440	.0120
20.000			.3670	.0150	.0070	.0480			.0680		.0170				
40.000			.4030	.0110	-.0050	.0260			.0480		.0340	.0990	.0840	.0200	-.0200
55.000			.4170	.0100	-.0090	.0220			.0230		.0670				
70.000			.4190	.0310	-.0050	.0240			.0110		.0430	-.0270	-.0300	.0000	.0000
90.000		1.0300	.4420	.0810	.0690	.0220			.0320		-.0690	-.0670	-.0670	-.0300	-.0030
120.000			.5020	.1470	.1030	.1050			.1040		.0170	-.0670	-.0750	-.0740	-.0200
142.000										.1320					
150.000			.5590	.2130	.2020	.2420			.6320		-.0110	-.0630	-.0560	-.0440	-.0380
157.000								.9110							
162.000									.8880						
165.000											-.0540	-.0590	-.0370	-.0250	-.0400
169.000									.9350						
172.000							1.0450								
180.000	1.7120	1.2080	.5710	.2840	.2760	.3330			1.2220		-.0390	-.0310	-.0200	-.0190	-.0270

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0190							-.1000		-.1010
40.000	-.0180	-.0280		-.0080	-.0350	-.0550	-.0780			-.0980
70.000		-.0270	-.0480	-.0470	-.0290	-.0120	-.0310	-.0370		
90.000		-.0060	-.0230	.0000	.0110	.0000	-.0170	-.0260		
105.000				.0450	.0060	.0000	-.0200	-.0300		
110.000									.0040	
120.000		.0010	-.0020	.1090	.0770	-.0330	-.0520	-.0330	-.0140	
135.000				.3690	.3630	-.0050	-.0170	-.0090		
150.000		-.0160	-.0070	.1190	.3020	.0520	.0500	.0430		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (2) = 2.999 BETAT (5) = 4.380

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0470		.0440	.2890	.1620	.0720	.0490		
180.000		-.0380	-.0450	.0260						

MACH (2) = 2.999 BETAT (6) = 6.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.6910	.9090	.3730	.0200	.0100	.0710			.1450		.1080	.0930	.0800	.0150	-.0130
25.000			.3560	.0050	.0090	.0640			.1070		.0530				
40.000			.3740	.0050	-.0110	.0440			.0630		-.0010	.0340	.0390	-.0080	-.0460
55.000			.3770	.0040	-.0210	.0030			.0160		.0570				
70.000			.3660	.0030	-.0220	.0150			.0610		.0320	-.0240	-.0560	-.0190	-.0690
90.000		.9590	.3880	.0340	-.0110	.0050			.0060		-.0360	-.0810	-.0790	-.0610	-.0110
125.000			.4560	.1190	.0790	.0710			.0700		-.0090	-.0840	-.0890	-.0860	-.0410
142.000										.0099					
150.000			.5230	.1960	.1840	.2170			.5810		-.0240	-.0750	-.0630	-.0520	-.0440
157.000								.8890							
162.000									.8690						
165.000											-.0720	-.0610	-.0420	-.0420	-.0640
169.000									.9280						
172.000							.9770								
180.000	1.6910	1.2730	.5630	.2790	.2680	.3260			1.2030		-.0320	-.0370	-.0280	-.0230	-.0420

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0410							-.1120		-.1140
40.000	-.0320	-.0350		-.0230	-.0520	-.0770	-.0980			-.0810
70.000		-.0270	-.0480	-.0430	-.0310	-.0110	-.0330	-.0460		
90.000		-.0690	-.0240	-.0040	.0030	-.0060	-.0240	-.0370		
105.000				.0370	-.0080	-.0040	-.0340	-.0420		
110.000									-.0330	
120.000		-.0090	-.0090	.1080	.0540	-.0640	-.0640	-.0530	-.0440	
133.000				.4720	.3630	-.0210	-.0350	-.0310		
150.000		-.0530	-.0550	.0410	.1830	.0650	.0630	.0260		
165.000		-.0700		.0430	.1470	.0720	.0230	-.0190		
180.000		-.0790	-.0620	-.0270						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (2) = 2.999 BETAT (7) = 8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.8880	.9100	.3750	.0050	.0270	.0940			.1830		.0950	.0730	.0730	.0110	-.0010
20.000			.3450	-.0060	.0260	.0670			.1160		.0590				
40.000			.3490	-.0070	-.0210	.0300			.0410		-.0160	-.0250	-.0460	-.0670	-.0710
55.000			.3380	-.0080	-.0320	.0120			.0260		.0450				
70.000			.3220	-.0080	-.0390	-.0050			.0060		.0320	-.0370	-.0640	-.0330	-.0210
90.000		.8970	.3380	.0080	-.0290	-.0080			-.0350		-.0590	-.0960	-.0970	-.0800	-.0320
120.000			.4120	.0920	.0600	.0530			.0440		-.0370	-.1010	-.1030	-.0940	-.0700
142.000										-.0040					
150.000			.4900	.1770	.1690	.1960			.5240		-.0410	-.0910	-.0730	-.0550	-.0460
157.000								.8150							
162.000									.8510						
165.000											-.0930	-.0720	-.0460	-.0630	-.0780
169.000									.9120						
172.000							.9150								
180.000	1.6660	1.2580	.5360	.2730	.2650	.3250			1.1840		-.0340	-.0460	-.0330	-.0540	-.0770

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0360							-.1170		-.1010
40.000	-.0660	-.0480		-.0360	-.0840	-.0850	-.1040			-.0890
70.000		-.0290	-.0460	-.0420	-.0410	-.0060	-.0290	-.0460		
90.000		-.0220	-.0320	-.0310	-.0420	-.0280	-.0300	-.0460		
105.000				.0320	-.0030	-.0070	-.0440	-.0460		
110.000									-.0060	
120.000		-.0280	-.0320	.1130	-.0030	-.0750	-.0740	-.0650	-.0530	
135.000				.2300	.3020	-.0340	-.0530	-.0540		
150.000		-.0690	-.0870	-.0260	.0200	.0170	-.0120	-.0280		
165.000		-.0690		-.0060	.0650	-.0080	-.0330	-.0690		
180.000		-.1090	-.0910	-.0650						

MACH (3) = 3.502 BETAT (1) = -8.740

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.8180	.9490	.3980	.0340	.0060	.0940			.1890		.1310	.0810	.0690	.0430	.0190
20.000			.4860	.0660	.0070	.0940			.1390		.1750				
40.000			.6770	.1300	.0980	.1770			.1270		.2460	.1480	.0780	.0470	.0540
55.000			.7900	.1900	.1920	.1740			.2360		.4030				
70.000			.8700	.2920	.2160	.2050			.2250		.3010	.2400	.1450	.1190	.1000
90.000		1.5680	.9220	.3440	.2380	.2350			.2250		.2540	.1200	.1450	.1110	.0810
120			.8910	.3860	.3180	.3480			.2480		.2350	.0820	.0460	.0790	.0590

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AMES 87-707 IA9 O2A + S3 + ORBITER FUSELAGE (RBNB12)

MACH (3) = 3.502 BETAT (1) = -8.740

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI										.2400					
142.000									1.0570		.0970	.0650	.0430	.0330	.0330
150.000			.8000	.3480	.3220	.3930		1.2120							
157.000									1.1620						
162.000											.0600	.0500	.0430	.0300	.0480
165.000									1.0660						
169.000							1.0710								
172.000									1.3250		.0040	-.0150	-.0170	-.0440	-.0580
180.000	1.0180	1.3470	.6040	.3210	.2770	.3230									

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.0660		-.0820
.000	-.0050									-.0480
40.000	.0450	.0510		.2250	.1960	.0980	.0640			
70.000		.0350	-.0420	.0440	.0340	.0590	.0410	.0460		
90.000		.0480	.0190	.0230	.0690	.0910	.1000	.1000		
105.000				.1160	.1180	.0950	.1210	.0960		
115.000									.0950	
120.000		.0350	.0240	.3730	.3210	.0960	.0930	.1140	.1040	
135.000				.3550	.3960	.0580	.0690	.1310		
150.000		.0300	.0280	.1070	.1660	-.0260	-.0480	.0480		
165.000		.0430		.1070	.1790	.1040	.1650	.0940		
180.000		-.0770	-.0870	-.0600						

MACH (3) = 3.502 BETAT (2) = -6.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.8410	.9450	.3920	.0290	.0170	.0880			.1550		.0810	.0850	.0620	.0420	.0680
20.000			.4990	.0510	.0050	.0040			.1270		.1660				
40.000			.6290	.0650	.0660	.1570			.1120		.2410	.1160	.0660	.0460	.0310
55.000			.7260	.1390	.1490	.1410			.1840		.2640				
70.000			.7980	.2170	.1730	.1660			.1740		.2140	.1700	.1080	.0940	.0770
90.000		1.4980	.8450	.2920	.1930	.1930			.1700		.1860	.0640	.0830	.0990	.0620
120.000			.8360	.3400	.2790	.2980			.3940		.1870	.0410	.0210	.0520	.0420
142.000										.2010					
150.000			.7740	.3400	.3060	.3670			.9930		.0650	.0330	.0230	.0120	.0160
157.000								1.1830							
162.000									1.1210						
165.000											.0350	.0110	.0280	.0110	.0160
169.000									1.0600						
172.000							1.1020								

AMES 87-707 IA9 CEA + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (3) = 3.502 BETAT (2) = -6.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.8410	1.3670	.6080	.3050	.2770	.3290			1.3520		-.0150	-.0270	-.0180	-.0270	-.0410
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0190							-.0840		-.0900					
40.000	.0270	.0160		.1770	.1440	.0650	.0370			-.0670					
70.000		.0170	-.0190	-.0170	.0080	.0290	.0150	.0180							
90.000		.0290	.0010	.0020	.0410	.0610	.0680	.0610							
105.000				.0810	.0830	.0610	.0770	.0640							
110.000									.0850						
120.000		.0200	.0090	.3260	.2630	.0610	.0350	.0830	.0750						
135.000				.3580	.3640	.0230	.0000	.0170							
150.000		.0160	.0130	.0960	.1720	-.0230	-.0080	.0260							
165.000		.0270		.0810	.1760	.1210	.1590	.0920							
180.000		-.0580	-.0490	-.0320											

MACH (3) = 3.502 BETAT (3) = -4.350

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8510	.9430	.3950	.0300	.0190	.0840			.1310		.0550	.0770	.0810	.0460	.0220
20.000			.4410	.0380	.0150	.0800			.1210		.1080				
40.000			.5810	.0590	.0430	.1060			.0870		.2580	.1190	.0650	.0370	.0230
55.000			.6630	.1090	.1120	.1160			.1470		.1690				
70.000			.7230	.1920	.1320	.1220			.1310		.1650	.0820	.0960	.0700	.0540
90.000		1.4260	.7700	.2450	.1530	.1560			.1310		.1550	.0430	.0260	.0700	.0430
120.000			.7770	.3080	.2420	.2540			.3280		.1640	.0290	.0010	.0110	.0250
142.000										.1670					
150.000			.7420	.3080	.2850	.3380			.9220		.0580	.0280	.0020	-.0050	.0050
157.000								1.1380							
162.000									1.0780						
165.000											.0330	.0040	.0090	-.0040	-.0070
169.000									1.0510						
172.000							1.1030								
180.000	1.8510	1.3790	.6140	.3080	.2790	.3240			1.3610		-.0670	-.0170	-.0190	-.0110	-.0310
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0110							-.0980		-.0840					
40.000	.0110	-.0490		.1240	.1070	.0180	-.0220			-.0760					

AMES 87-707 IA9 ORA + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (3) = 3.302 BETAT (3) = -4.350

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		.0000	-.0310	-.0310	-.0130	-.0120	-.0260	-.0020		
90.000		.0140	-.0140	-.0110	.0170	.0160	.0170	.0380		
105.000				.0610	.0510	.0160	.0270	.0370		
110.000									.0730	
120.000		.0090	-.0020	.3110	.2440	.0180	-.0070	.0400	.0490	
135.000				.3740	.3470	.0190	-.0260	.0110		
150.000		.0080	.0040	.0870	.1820	-.0360	-.0240	.0250		
165.000		.0110		.0640	.1740	.1270	.1550	.0940		
180.000		-.0280	-.0400	.0150						

MACH (3) = 3.502 BETAT (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.8670	.9430	.3770	.0310	.0170	.1110			.1290		.0520	.0740	.1360	.0720	.0410
20.000			.4080	.0300	.0110	.0830			.1470		.0520				
40.000			.5220	.0270	.0140	.0770			.1130		.0880	.1040	.0720	.0530	.0390
55.000			.5530	.0390	.0550	.0590			.0770		.0680				
70.000			.5860	.1050	.0700	.0650			.0590		.0890	.0300	.0110	.0370	.0360
90.000		1.2770	.6270	.1630	.0880	.0910			.0670		.0710	-.0050	-.0170	.0110	.0240
120.000			.6630	.2410	.1810	.1730			.1990		.0980	-.0060	-.0220	-.0280	.0030
142.000										.1160					
150.000			.6770	.2790	.2530	.2870			.2990		.0420	-.0030	-.0190	-.0190	-.0220
157.000								1.1040							
162.000									1.0140						
165.000											.0110	-.0150	-.0180	-.0110	-.0160
169.000									1.0350						
172.000							1.1870								
180.000	1.8670	1.4020	.6210	.3120	.2870	.3330			1.3590		-.0120	-.0080	-.0080	-.0020	-.0110

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0140							-.0770		-.0750
40.000	.0020	.0160		.0650	.0230	-.0370	-.0530			-.0860
70.000		-.0120	-.0370	-.0360	-.0220	-.0370	-.0470	-.0190		
90.000		.0010	-.0220	-.0190	.0040	-.0030	-.0090	.0030		
105.000				.0580	.0410	-.0080	-.0180	-.0420		
110.000									.0810	
120.000		.0070	.0050	.2320	.1240	-.0050	-.0320	-.0070	.0080	
135.000				.2770	.3520	-.0080	-.0180	.0150		
150.000		.0080	.0110	.1220	.2290	.0110	.0260	.0680		

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AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (3) = 3.502 BETAT (4) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		.0420		.1310	.1940	.1390	.1170	.0650		
180.000		-.0670	.0030	.0170						

MACH (3) = 3.502 BETAT (5) = 4.460

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	1.8460	.9440	.3720	.0300	.0280	.0820			.1310		.0590	.0980	.0380	.0500	.0220
20.000			.3760	.0180	.0250	.0660			.2160		.0350				
40.000			.4220	.0190	.0010	.0520			.0510		.0300	.0130	.0570	.0340	-.0090
55.000			.4460	.0180	.0060	.0340			.0410		.0380				
70.000			.4490	.0460	.0150	.0370			.0660		.0330	-.0150	-.0380	-.0080	.0030
90.000		1.1070	.4850	.0890	.0300	.0370			-.0030		-.0020	-.0480	-.0540	-.0510	-.0160
120.000			.5420	.1740	.1180	.1160			.1070		.0370	-.0450	-.0580	-.0620	-.0480
142.000										.0640					
150.000			.5980	.2350	.2120	.2540			.0560		.0160	-.0380	-.0430	-.0390	-.0350
157.000								1.0080							
162.000									.9860						
165.000											-.0310	-.0380	-.0300	-.0210	-.0330
169.000									1.0310						
172.000							1.0680								
180.000	1.8460	1.3920	.6140	.3030	.2820	.3240			1.34		-.0170	-.0130	-.0160	-.0110	-.0300

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0130							-.0830		-.0840
40.000	-.0290	-.0160		-.0010	-.0280	-.0440	-.0740			-.0940
70.000		-.0270	-.0460	-.0410	-.0340	-.0220	-.0370	-.0320		
90.000		-.0280	-.0230	-.0120	.0060	-.0130	-.0280	-.0250		
105.000				.0370	.0050	-.0120	-.0310	-.0250		
110.000									.0620	
120.000		-.0070	-.0470	.0860	.0560	-.0210	-.0550	-.0360	-.0260	
135.000				.5300	.3370	-.0110	-.0250	-.0060		
150.000		-.0270	-.0210	.0880	.4110	.0410	.0240	.0350		
165.000		-.0370		.0160	.1960	.1030	.0360	.0340		
180.000		-.0270	-.0360	.0190						

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (3) = 3.502 BETAT (6) = 6.660

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8190	.9430	.3710	.0310	.0120	.0830			.1580		.0830	.0820	.0580	.0380	.0070
20.000			.3620	.0160	.0070	.0710			.1560		.0540				
40.000			.3880	.0140	-.0200	.0430			.0310		.0040	-.0160	-.0040	-.0160	-.0330
55.000			.3990	.0140	-.0100	.0150			.0240		.0260				
70.000			.3940	.0280	-.0050	.0160			-.0050		.0070	-.0440	-.0610	-.0280	-.0030
90.000		1.0250	.4170	.0560	.0090	.0130			-.0120		-.0380	-.0800	-.0800	-.0660	-.0380
125.000			.4870	.1350	.0930	.0880			.0650		.0010	-.0690	-.0690	-.0710	-.0650
142.000										.0410					
150.000			.5570	.2120	.1920	.2270			.5930		-.0100	-.0640	-.0490	-.0440	-.0380
157.000								.9390							
162.000									.9630						
165.000											-.0610	-.0560	-.0310	-.0330	-.0530
169.000									1.0150						
172.000							.9970								
180.000	1.8190	1.3740	.6020	.2920	.2730	.3140			1.3250		-.0240	-.0290	-.0230	-.0210	-.0480

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0800							-.1300		-.0920
40.000	-.0520	-.0350		-.0180	-.0420	-.0950	-.1300			-.0910
70.000		-.0320	-.0490	-.0420	-.0420	-.0470	-.0690	-.0330		
90.000		-.0150	-.0270	-.0220	.0010	-.0510	-.0670	-.0310		
105.000				.0220	-.0040	-.0520	-.0780	-.0360		
110.000									-.0310	
125.000		-.0230	-.0170	.0810	-.0040	-.0940	-.0960	-.0420	-.0320	
135.000				.3240	.2870	-.0940	-.0700	-.0220		
150.000		-.0390	-.0500	.0290	.1420	.0110	-.0020	.0160		
165.000		-.0500		-.0010	.0820	.0070	-.0390	-.0240		
180.000		-.0630	-.0530	-.0370						

MACH (3) = 3.502 BETAT (7) = 8.860

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7880	.9390	.3730	.0300	.0000	.0830			.1720		.1160	.0580	.0410	.0390	.0090
20.000			.3480	.0120	-.0020	.0610			.1100		.0440				
40.000			.3580	.0110	-.0310	.0290			.0440		-.0190	-.0360	-.0590	-.0600	-.0630
55.000			.3540	.0090	-.0230	-.0060			.0060		.0210				
70.000			.3390	.0100	-.0230	-.0060			-.0200		-.0200	-.0550	-.0660	-.0390	-.0180
90.000		.9480	.3590	.0340	-.0130	-.0070			-.0360		-.0570	-.0900	-.0880	-.0760	-.0560
120.000			.4310	.1090	.0670	.0600			.0490		-.0260	-.0800	-.0790	-.0810	-.0760

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB12)

MACH (3) = 3.502 BETAT (7) = 8.860

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5126
PHI										.0200					
142.000									.5230		-.0230	-.0750	-.0600	-.0520	-.0400
150.000			.5140	.1890	.1710	.1900		.8540							
157.000									.9390						
162.000											-.0710	-.0640	-.0400	-.0510	-.0670
165.000									.9880						
169.000							.9170								
172.000									1.2900		-.0190	-.0350	-.0340	-.0540	-.0670
180.000	1.7880	1.3500	.5920	.2820	.2640	.2950									

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.1400		-.0960
.000	-.0030									-.0750
40.000	-.0640	-.0570		-.0250	-.0380	-.1260	-.1430			
70.000		-.0380	-.0500	-.0430	-.0390	-.0450	-.0690	-.0280		
90.000		-.0300	-.0380	-.0390	-.0130	-.0680	-.0800	-.0420		
105.000				.0240	-.0150	-.0720	-.0900	-.0430		
110.000									-.0650	
120.000		-.0310	-.0310	.0780	-.0130	-.1030	-.1050	-.0520	-.0420	
135.000				.1680	.1970	-.1020	-.1080	-.0580		
150.000		-.0680	-.0720	-.0410	.0150	-.0430	-.0660	-.0310		
165.000		-.0720		-.0470	.0350	-.0440	-.0840	-.0580		
180.000		-.0880	-.0780	-.0650						

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNB13) (15 MAY 73)

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0390 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

MACH (1) = 2.498 BETAT (1) = -8.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5125
PHI															
.000	1.4270	.9150	.4530	.0470	.0770	.2660			.1590		.0490	.0410	.0010	-.0310	-.0510
20.000			.5150	.0850	.0950	.2650			.1550		.0530				
40.000			.6530	.1720	.1480	.2290			.2080		.0950	.0320	.0420	.0010	.0440
55.000			.7110	.2310	.2020	.4310			.3410		.2540				
70.000			.7410	.2280	.2020	.3920			.3960		.3160	.1100	.0200	.0270	.02-
90.000		1.2410	.7340	.2490	.1920	.2850			.3990		.3610	.1010	.0230	.0140	.0110
120.000			.6880	.2710	.2370	.3080			.4590		.2710	.0590	.0150	-.0060	-.0130
142.000										.1430					
150.000			.6040	.2280	.2330	.3150			.8420		.0140	.0190	.0150	.0070	-.0210
157.000								.9630							
162.000									.8290						
165.000											-.0470	.0090	.0490	.0170	-.0190
169.000									.7180						
172.000							.8820								
180.000	1.4270	1.0230	.4330	.1950	.1880	.2730			.9190		-.1020	-.1000	-.0610	-.1210	-.1430

X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0220							-.1360		-.1160
40.000	.1120	.0800		.2450	.1630	.1270	-.0080			-.1240
70.000		-.0150	-.0250	-.0200	.0100	.0410	.0150	.0060		
90.000		-.0020	-.0130	.0160	.0980	.0720	.0490	.0250		
105.000				.1300	.1570	.0740	.0410	.0150		
110.000									.0210	
125.000		-.0140	-.0280	.3770	.3290	.0850	.0410	.0300	.0250	
135.000				.2440	.2650	-.0210	-.0520	-.0410		
150.000		-.0330	-.0360	.0380	.0580	-.0930	-.0430	-.0620		
165.000		-.0300		.0650	.1320	.0770	.1460	.0450		
180.000		-.1220	-.1080	-.0450						

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (1) = 2.498 BETAT (2) = -6.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4395	.9280	.4500	.0410	.0890	.1020			.1390		.0660	.0810	.0350	-.0220	-.0560
20.000			.5120	.0760	.1040	.1810			.1640		.0630				
40.000			.6240	.1520	.1340	.1850			.1980		.0880	.0350	.0010	-.0120	.0130
55.000			.6560	.1890	.1590	.3720			.2960		.2220				
70.000			.6730	.1900	.1490	.2140			.3560		.2870	.0950	.0090	.0070	.0040
90.000		1.1830	.6710	.2010	.1450	.2170			.3140		.3260	.0880	.0170	-.0080	-.0110
120.000			.6410	.2320	.1960	.2540			.3670		.2270	.0470	-.0030	-.0160	-.0270
142.000										.0990					
150.000			.5800	.2090	.2140	.2920			.7870		.0030	-.0120	-.0100	-.0080	-.0340
157.000								.9220							
162.000									.7940						
165.000											-.0540	-.0310	.0110	.0010	-.0270
169.000									.7180						
172.000							.8720								
180.000	1.4390	1.0320	.4360	.1910	.1870	.2790			.9370		-.0950	-.0990	-.0710	-.0900	-.1140

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0410							-.1220		-.1010
40.000	.0840	.0680		.1960	.1210	.0870	-.0230			-.1360
70.000		-.0400	-.0550	-.0390	.0000	.0170	-.0100	-.0130		
90.000		-.0240	-.0430	-.0020	.0680	.0540	.0270	.0050		
105.000				.0900	.1220	.0520	.0280	-.0030		
110.000									.0240	
120.000		-.0340	-.0400	.2970	.2520	.0590	.0320	.0160	.0030	
135.000				.2490	.2700	-.0250	-.0450	-.0340		
150.000		-.0400	-.0440	.0460	.0860	-.0810	-.0230	.0210		
165.000		-.0380		.0570	.1450	.1010	.1280	.0300		
180.000		-.0900	-.0770	-.0460						

MACH (1) = 2.498 BETAT (3) = -4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4550	.9010	.4300	.0130	.0410	.0320			.1400		.1190	.1040	.0770	.0110	-.0580
20.000			.4780	.0420	.0630	.0250			.1850		.0800				
40.000			.5700	.1110	.0760	.0500			.2250		.0840	.0420	.0140	-.0090	-.0630
55.000			.5940	.1450	.1140	.1740			.2730		.2020				
70.000			.6020	.1400	.1040	.1680			.2420		.2690	.0830	.0000	-.0070	-.0140
90.000		1.1270	.6050	.1560	.1020	.1710			.2070		.2810	.0770	.0120	-.0190	-.0270
120.000			.5910	.2000	.1640	.2180			.2920		.1320	.0240	-.0040	-.0210	-.0390

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (1) = 2.498 BETAT (3) = -4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0640					
150.000			.5570	.1910	.2000	.2660			.7380		-.0690	-.0440	-.0280	-.0160	-.0300
157.000								.8950							
162.000									.7640						
165.000											-.0660	-.0600	-.0370	-.0010	-.0250
169.000									.7230						
172.000							.8800								
180.000	1.4550	1.0480	.4400	.1940	.1940	.2660			.9520		-.0980	-.0920	-.0680	-.0470	-.0790

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0700							-.1180		-.0950
40.000	.0470	.0410		.1540	.0810	.0420	-.0370			-.1450
70.000		-.0500	-.0620	-.0540	-.0670	-.0640	-.0270	-.0240		
90.000		-.0350	-.0510	.0020	.0390	.0900	.0440	-.0080		
105.000				.0670	.0840	.0540	.0480	-.0170		
115.000									.0680	
120.000		-.0370	-.0420	.2190	.2030	.0560	.0090	.0460	-.0040	
135.000				.2790	.2770	-.0350	-.0350	-.0140		
150.000		-.0390	-.0340	.0810	.1490	-.0580	.0030	.0600		
165.000		-.0350		.0620	.1800	.1270	.1190	.0250		
180.000		-.0600	-.0450	-.0280						

MACH (1) = 2.498 BETAT (4) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4830	.9120	.4210	.0210	.0630	.1140			.1230		.1670	.1360	.1030	.0040	-.0630
20.000			.4390	.0320	.0740	.0570			.1350		.1370				
40.000			.4910	.0860	.0540	.0230			.2110		.0080	.0610	.0590	-.0110	-.0540
55.000			.4910	.0700	.0340	.0780			.1060		.1750				
75.000			.4780	.0700	.0240	.0830			.0940		.2180	.0560	-.0240	-.0340	-.0360
90.000		1.0040	.4750	.0720	.0220	.0780			.0920		.1120	.0460	-.0130	-.0400	-.0440
120.000			.4920	.1320	.0940	.0890			.1510		.0510	-.0680	-.0380	-.0380	-.0460
142.000										.0020					
150.000			.5010	.1650	.1630	.2120			.6290		-.0450	-.0650	-.0610	-.0350	-.0200
157.000								.8330							
162.000									.7020						
165.000											-.0960	-.0990	-.0720	-.0490	-.0160
169.000									.7260						
172.000							.9020								

AMES 67-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (1) = 2.498 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
180.000	1.4630	1.0650	.4440	.2040	.1940	.2660			.9570		-.1070	-.0820	-.0780	-.0560	-.0850

X/LB	.5873	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0880							-.1110		-.0740
40.000	-.0060	-.0080		.0400	-.0050	-.0300	-.1030			-.1010
70.000		-.0680	-.0730	-.0670	-.0370	-.0340	-.0550	-.0530		
90.000		-.0530	-.0570	-.0120	-.0160	-.0080	-.0300	-.0380		
105.000				.0230	.0080	.0080	-.0290	-.0470		
110.000									-.0280	
120.000		-.0330	-.0380	.1510	.1160	-.0270	-.0370	-.0160	-.0170	
135.000				.3740	.2920	-.0450	-.0380	.0200		
150.000		-.0200	-.0240	.1310	.2410	-.0020	.0340	.0460		
165.000		-.0150		.1170	.2190	.1520	.1130	.0150		
180.000		-.0130	-.0160	-.0160						

MACH (1) = 2.498 BETAT (5) = 4.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.4480	.9010	.4150	.0120	.0580	.0450			.1360		.0940	.1050	.0710	.0060	-.0590
20.000			.4020	.0070	.0440	.0490			.1150		.1050				
40.000			.4110	.0110	.0170	.0050			.1190		.1150	.0550	.0220	-.0450	-.0810
55.000			.3890	.0040	.0030	.0050			.0370		.1490				
70.000			.3560	.0020	-.0120	.0230			.0320		.1080	.0160	-.0290	-.0480	-.0610
90.000		.8740	.3530	.0020	-.0220	.0080			.0670		.0220	-.0440	-.0300	-.0490	-.0600
125.000			.3060	.0720	.0420	.0650			.0690		-.0250	-.1130	-.1020	-.0540	-.0320
142.000										-.0420					
150.000			.4280	.1270	.1300	.1780			.5170		-.0770	-.1220	-.1050	-.0820	-.0170
157.000								.7580							
182.000									.6640						
185.000											-.1210	-.1150	-.0910	-.0730	-.0420
189.000									.7170						
172.000							.8780								
180.000	1.4480	1.0490	.4340	.1910	.1930	.2520			.9360		-.1030	-.0940	-.0780	-.0560	-.0850

X/LB	.5873	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0850							-.1080		-.1020
[illegible]	-.0340	-.0290		-.0340	-.0660	-.0860	-.1320		[illegible]	-.0660

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 C0A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (1) = 2.498 BETAT (5) = 4.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8849	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0670	-.0750	-.0730	-.0540	-.0490	-.0640	-.0690		
90.000		-.0540	-.0630	-.0230	-.0280	-.0330	-.0540	-.0630		
105.000				.0540	-.0260	-.0300	-.0580	-.0690		
110.000									-.0660	
120.000		-.0360	-.0470	.0760	.0330	-.0860	-.0720	-.0540	-.0460	
135.000				.4800	.2900	-.0520	-.0480	-.0410		
150.000		-.0240	-.0320	.1440	.3150	.0470	.0160	-.0420		
165.000		-.0400		-.0190	.2530	.1490	.0620	.0060		
180.000		-.0680	-.0510	-.0350						

MACH (1) = 2.498 BETAT (6) = 6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4360	.8880	.4030	.0180	.0310	.2540			.1050		.0410	.0830	.0140	-.0100	-.0580
20.000			.3870	.0060	.0260	.1120			.1000		.0780				
40.000			.3870	.0000	.0060	-.0090			.0880		.0210	.0320	-.0220	-.0720	-.0910
55.000			.3580	-.0110	-.0170	-.0070			.0320		.0780				
70.000			.3160	-.0270	-.0270	.0010			.0250		.0610	.0090	-.0340	-.0590	-.0680
90.000		.8170	.3040	-.0220	-.0300	-.0070			.0210		.0040	-.0750	-.0450	-.0550	-.0660
120.000			.3460	.0450	.0190	.0270			.0300		-.0480	-.1270	-.1240	-.0650	-.0330
142.000										-.0630					
150.000			.3970	.1110	.1130	.1660			.0650		-.0910	-.1320	-.1140	-.0900	-.0330
157.000								.7540							
162.000									.6550						
165.000											-.1370	-.1200	-.0980	-.0850	-.0990
169.000									.7160						
172.000							.8230								
180.000	1.4360	1.0450	.4300	.1870	.1890	.2500			.9290		-.0950	-.0990	-.0760	-.0810	-.1210

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0360							-.1230		-.1000
40.000	-.0430	-.0100		-.0630	-.0950	-.0970	-.1190			-.0990
70.000		-.0590	-.0760	-.0800	-.0630	-.0540	-.0730	-.0740		
90.000		-.0480	-.0600	-.0340	-.0350	-.0410	-.0610	-.0730		
105.000				-.0090	-.0490	-.0430	-.0790	-.0780		
110.000									-.0720	
120.000		-.0420	-.0500	.1210	.0160	-.1060	-.0900	-.0770	-.0680	
135.000				.4870	.2980	-.0540	-.0680	-.0690		
150.000		-.0460	-.0530	.0760	.2790	.0280	.0130	-.0220		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (1) = 2.498 BETAT (6) = 6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0730		-.0300	.2520	.1670	.0230	-.0370		
180.000		-.0950	-.0790	-.0310						

MACH (1) = 2.498 BETAT (7) = 8.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4140	.8740	.3960	.0200	.0390	.2820			.0970		.0320	.0540	-.0040	-.0420	-.0560
20.000			.3710	.0010	.0180	.1960			.0630		.0190				
40.000			.3510	-.0150	-.0690	-.0290			.0150		-.0520	-.0510	-.0760	-.1010	-.1210
55.000			.3130	-.0370	-.0380	-.0160			.0110		.0310				
70.000			.2660	-.0390	-.0460	-.0230			.0100		.0500	-.0380	-.0430	-.0740	-.0740
90.000		.7560	.2530	-.0530	-.0490	-.0230			-.0020		-.0110	-.0840	-.0760	-.0660	-.0660
120.000			.3000	.0150	-.0030	-.0040			.0040		-.0820	-.1470	-.1420	-.0780	-.0370
142.000										-.0830					
150.000			.3640	.0930	.0950	.1120			.4030		-.1080	-.1450	-.1260	-.0870	-.0950
157.000								.6350							
162.500									.6360						
165.000											-.1540	-.1330	-.1060	-.1230	-.1440
169.000									.7120						
172.000							.7460								
180.000	1.4140	1.0300	.4200	.1820	.1860	.2590			.9060		-.0960	-.1000	-.0760	-.1330	-.1600

X/LB	.5873	.6626	.7380	.7969	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0270							-.1350		-.1130
40.000	-.0890	-.0410		-.1140	-.0880	-.1350	-.1280			-.1070
70.000		-.0540	-.0820	-.0810	-.0680	-.0560	-.0790	-.0850		
90.000		-.0470	-.0640	-.0420	-.0440	-.0445	-.0720	-.0840		
105.000				-.0050	-.0520	-.0570	-.0840	-.0890		
110.000									-.0110	
120.000		-.0640	-.0590	.1420	.0130	-.1200	-.1090	-.0960	-.0860	
135.000				.4810	.3310	-.0640	-.0850	-.0770		
150.000		-.1320	-.1350	-.0800	-.0220	-.0710	-.0580	-.0700		
165.000		-.1320		-.0630	.1130	.0010	-.0580	-.0990		
180.000		-.1380	-.1230	-.0510						

AMES 87-757 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (2) = 2.999 BETAT (1) = -8.580

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.0355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.5010	.8370	.3880	.0430	.0310	.0550			.1890		.0760	.0440	.0630	.0000	-.0110
20.000			.4420	.0630	.0330	.0740			.2560		.0950				
40.000			.6080	.1470	.0970	.2080			.2270		.1660	.1010	.0260	.0290	.0200
55.000			.6930	.1750	.1650	.2210			.4110		.2980				
70.000			.7480	.2450	.1740	.2160			.2430		.3830	.1730	.0770	.0610	.0480
90.000		1.3000	.7630	.2690	.1820	.2190			.2440		.3590	.1620	.0830	.0510	.0280
120.000			.7580	.2850	.2320	.2710			.3850		.1850	.0610	.0580	.0210	.0060
142.000										.1620					
150.000			.6190	.2420	.2240	.2910			.8320		.0440	.0190	.0120	.0230	.0090
157.000								.9490							
162.000									.8730						
165.000											.0080	.0100	.0140	.0370	.0200
169.000									.7840						
172.000							.8610								
180.000	1.5010	1.0640	.4520	.2260	.1850	.2290			.9840		-.0460	-.0550	-.0490	-.0790	-.0980

X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0420							-.1140		-.0920
40.000	.0470	.0870		.2250	.1880	.1110	.0360			-.0800
70.000		-.0670	-.0370	-.0280	.0030	.0250	.0690	.0140		
90.000		.0080	-.0160	-.0090	.0690	.0560	.0550	.0570		
105.000				.0850	.1010	.1150	.0610	.0500		
110.000									.0840	
120.000		-.0060	-.0120	.3380	.2650	.0760	.0560	.0640	.0470	
135.000				.2510	.2020	-.0240	-.0380	-.0070		
150.000		-.0670	-.0160	.0370	.0730	-.0890	-.0600	.0030		
165.000		-.0050		.0440	.1200	.0330	.1150	.0470		
180.000		-.1090	-.0940	-.0680						

MACH (2) = 2.999 BETAT (2) = -6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.5200	.8360	.3470	.0230	.0160	.0640			.1490		.0870	.0700	.0740	.0080	-.0190
20.000			.4170	.0200	.0240	.0740			.2890		.1040				
40.000			.5620	.0740	.0610	.1580			.2470		.1550	.0950	.0300	.0150	.0000
55.000			.6340	.1200	.1280	.1620			.3100		.2740				
70.000			.6810	.1780	.1380	.1590			.1890		.3240	.1590	.0630	.0460	.0270
90.000		1.2470	.7010	.2250	.1470	.1630			.1680		.2320	.1400	.0690	.0390	.0120
120.000			.6640	.2530	.2040	.2340			.3290		.1500	.0190	.0300	.0210	-.0010

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (2) = 2.999 BETAT (2) = -6.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1290					
150.000			.5990	.2330	.2170	.2740			.7850		.0250	.0010	-.0130	.0070	-.0020
157.000								.9230							
162.000									.8450						
165.000											-.0070	-.0150	-.0060	.0050	.0070
169.000									.7820						
172.000							.8570								
180.000	1.5200	1.0790	.4560	.2280	.1930	.2450			1.0050		-.0520	-.0580	-.0490	-.0610	-.0750

X/LB	.5873	.6626	.7580	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0470							-.0980		-.0850
40.000	.0180	.0800		.1870	.1480	.0660	.0100			-.0900
70.000		-.0220	-.0510	-.0420	-.0130	-.0060	-.0190	-.0070		
90.000		-.0490	-.0320	-.0280	.0300	.0280	.0250	.0290		
105.000				.0570	.0650	.0710	.0280	.0280		
110.000									.0590	
120.000		-.0160	-.0240	.2500	.2080	.0190	.0260	.0420	.0330	
135.000				.2270	.2660	-.0380	-.0540	-.0130		
150.000		-.0140	-.0220	.0440	.0830	-.0850	-.0550	.0040		
165.000		-.0120		.0500	.1090	.0560	.0830	.0410		
180.000		-.0930	-.0740	-.0290						

MACH (2) = 2.999 BETAT (3) = -4.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5410	.8420	.4190	.0470	.0210	.0260			.1110		.0820	.0830	.0540	.0450	-.0080
20.000			.4430	.0430	.0250	.0220			.1520		.1020				
40.000			.5310	.1120	.0800	.1260			.1010		.1490	.0800	.0330	.0080	.0070
55.000			.5850	.1140	.1090	.1370			.1570		.2470				
70.000			.6200	.1620	.1030	.1280			.1450		.2470	.1390	.0480	.0290	.0110
90.000		1.1930	.6400	.1860	.1130	.1370			.1210		.1540	.0960	.0570	.0190	-.0010
120.000			.6210	.2260	.1770	.1980			.2740		.1200	-.0030	-.0140	.0160	-.0110
142.000										.0990					
150.000			.5780	.2180	.2050	.2550			.7350		.0120	-.0140	-.0290	-.0140	-.0070
157.000								.9010							
162.000									.8140						
165.000											-.0170	-.0320	-.0220	-.0260	-.0010
169.000									.7890						
172.000							.8740								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (2) = 2.999 BETAT (3) = -4.26

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
180.000	1.5415	1.0990	.4630	.2190	.1970	.2420			1.0260		-.0520	-.0560	-.0450	-.0410	-.0440
X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0350							-.0860		-.0850					
40.000	-.0630	.0470		.1350	.0990	.0420	-.0160			-.0990					
75.000		-.0360	-.0610	-.0590	-.0270	-.0160	-.0160	-.0240							
90.000		-.0230	-.0450	-.0320	-.0030	.0090	.0040	.0050							
105.000				.0250	.0230	.0110	.0160	.0050							
115.000									.0410						
125.000		-.0240	-.0330	.1960	.1640	.0110	.0040	.0240	.0170						
135.000				.2390	.2560	-.0340	-.0320	-.0220							
150.000		-.0230	-.0270	.0500	.1070	-.0600	-.0310	.0100							
165.000		-.0190		.0530	.1250	.0890	.0940	.0370							
180.000		-.0630	-.0570	-.0420											

MACH (2) = 2.999 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.5870	.8480	.3440	.1090	.0260	.0300			.1050		.0800	.1300	.1190	.0740	-.0050
25.000			.3630	.1080	.0130	.0180			.1180		.0610				
40.000			.4430	.1450	.0330	.0790			.0620		.1380	.0570	.0490	.0200	-.0150
55.000			.4740	.0740	.0280	.0550			.1000		.1290				
75.000			.4910	.0810	.0330	.0610			.0650		.0950	.0590	.0190	-.0040	-.0160
90.000		1.0650	.5110	.1140	.0420	.0620			.0470		.0630	-.0110	.0040	-.0050	-.0220
120.000			.5210	.1610	.1160	.1110			.1660		.0510	-.0510	-.0560	-.0270	-.0210
142.000										.0480					
150.000			.5230	.1850	.1740	.2060			.6280		-.0130	-.0500	-.0580	-.0480	-.0190
157.000								.0550							
162.000									.7640		-.0470	-.0620	-.0520	-.0420	-.0260
165.000															
169.000									.7820						
172.000							.9510								
180.000	1.5870	1.1230	.4720	.1880	.2010	.2480			1.0330		-.0640	-.0520	-.0450	-.0380	-.0360

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0420							-.1250		-.0890
40.000	-.0370	-.0150		.0520	.0000	-.0520	-.0800			-.1160

AMES 87-70? IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (2) = 2.999 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0330	-.0890	-.0670	-.0470	-.0690	-.0780	-.0490		
90.000		-.0410	-.0560	-.0430	-.0400	-.0440	-.0500	-.0260		
105.000				.0020	-.0210	-.0440	-.0490	-.0280		
110.000									.0180	
120.000		-.0230	-.0320	.1620	.0970	-.0580	-.0780	-.0260	-.0120	
135.000				.3180	.2590	-.0690	-.0780	-.0110		
150.000		-.0160	-.0160	.0960	.1920	-.0270	-.0110	.0440		
165.000		-.0130		.0970	.1730	.0880	.0760	.0210		
180.000		-.0070	-.0090	-.0050						

MACH (2) = 2.999 BETAT (5) = 4.38

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5390	.8370	.3690	.0100	.0100	.0480			.1270		.0820	.0730	.0730	.0260	-.0130
20.000			.3730	.0390	.0070	.0320			.0810		.0510				
40.000			.3730	.0360	.0080	.0140			.0240		.0360	.0750	.0370	-.0070	-.0460
55.000			.3710	.0360	.0050	.0280			.0270		.0330				
70.000			.3650	.0180	-.0130	.0240			.0170		.0460	-.0380	-.0290	-.0170	-.0280
90.000		.9120	.3780	.0360	-.0110	.0120			.0110		-.0620	-.0590	-.0650	-.0190	-.0310
120.000			.4140	.1160	.0600	.0620			.0610		-.0690	-.0860	-.0830	-.0710	-.0260
142.000										.1650					
150.000			.4530	.1470	.1350	.1800			.0590		-.0430	-.0860	-.0730	-.0630	-.0520
157.000								.7860							
162.000									.7310						
165.000											-.0860	-.0840	-.0610	-.0530	-.0580
169.000									.7750						
172.000							.8480								
180.000	1.5390	1.1070	.4600	.2050	.1960	.2370			1.0180		-.0650	-.0640	-.0480	-.0460	-.0480

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0360							-.1170		-.0780
40.000	-.0580	-.0340		-.0160	-.0370	-.0880	-.1240			-.0740
70.000		-.0590	-.0720	-.0680	-.0520	-.0710	-.0840	-.0530		
90.000		-.0400	-.0550	-.0360	-.0240	-.0550	-.0850	-.0460		
105.000				.0130	-.0240	-.0570	-.0690	-.0490		
110.000									-.0460	
120.000		-.0170	-.0260	.0410	.0260	-.0930	-.0930	-.0540	-.0480	
135.000				.4580	.2930	-.0570	-.0640	-.0240		
150.000		-.0180	-.0170	.1480	.2640	-.0110	-.0110	.0140		

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AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (2) = 2.999 BETAT (5) = 4.380

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.786.	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0430		-.0130	.2080	.1060	.0290	.0310		
180.000		-.0730	-.0660	-.0680						

MACH (2) = 2.999 BETAT (6) = 6.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5130	.8360	.3370	.0150	.0170	.0680			.1530		.0850	.0680	.0590	.0010	-.0190
20.000			.3200	.0140	.0140	.0510			.0970		.0650				
40.000			.3330	.0080	-.0490	.0270			.0150		.0000	.0080	.0050	-.0350	-.0670
55.000			.3310	.0000	-.0190	.0150			.0150		.0320				
70.000			.3180	-.0070	-.0330	-.0010			.0090		.0230	-.0380	-.0460	-.0220	-.0350
90.000		.8470	.3280	.0100	-.0290	-.0050			-.0220		-.0260	-.0720	-.0700	-.0350	-.0330
120.000			.3680	.0740	.0420	.0440			.0290		-.0300	-.0950	-.0960	-.0810	-.0300
142.000										-.0150					
150.000			.4240	.1330	.1230	.1610			.0560		-.0510	-.0940	-.0830	-.0700	-.0550
157.000								.7360							
162.000									.0180						
165.000											-.0930	-.0860	-.0630	-.0640	-.0760
169.000									.0630						
172.000							.7880								
180.000	1.5130	1.0950	.4540	.2020	.1920	.2300			.0980		-.0580	-.0630	-.0560	-.0600	-.083.

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0470							-.1190		-.0860
40.000	-.0830	-.0380		-.0350	-.0570	-.0970	-.1240			-.0760
70.000		-.0560	-.0680	-.0630	-.0550	-.0700	-.0870	-.0600		
90.000		-.0390	-.0520	-.0380	-.0280	-.0600	-.0760	-.0510		
105.000				-.0080	-.0430	-.0800	-.0860	-.0580		
110.000									-.0630	
120.000		-.0200	-.0330	.0880	.0260	-.1090	-.1080	-.0640	-.0580	
135.000				.4330	.3060	-.0590	-.0780	-.0470		
150.000		-.0550	-.0600	.0080	.2120	-.0150	-.0320	.0020		
165.000		-.0770		-.0230	.1410	.0230	-.0330	-.0270		
180.000		-.1010	-.0720	-.0380						

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (2) = 2.999 BETAT (7) = 8.690

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4960	.8390	.3440	.0250	.0290	.0760			.1840		.0700	.0480	.0640	.0620	-.0100
20.000			.3180	.0220	.0270	.0350			.1070		.0490				
40.000			.3110	.0100	-.0690	.0030			.0310		-.0260	-.0430	-.0600	-.0710	-.0860
55.000			.2990	-.0110	-.0250	.0050			-.0020		.0180				
70.000			.2760	-.0250	-.0380	-.0110			.0040		.0140	-.0480	-.0520	-.0350	-.0450
90.000		.7910	.2830	-.0110	-.0410	-.0120			-.0290		-.0350	-.0730	-.0730	-.0540	-.0400
120.000			.3300	.0540	.0250	.0230			.0220		-.0460	-.0980	-.1040	-.0890	-.0420
142.000										-.0260					
150.000			.3910	.1210	.1110	.1250			.4080		-.0560	-.0960	-.0870	-.0750	-.0600
157.000								.6530							
162.000									.7060						
165.000											-.1660	-.0850	-.0670	-.0840	-.0930
169.000									.7510						
172.000							.7250								
180.000	1.4960	1.0810	.4540	.1980	.1880	.2230			.9840		-.0490	-.0570	-.0590	-.0850	-.1140

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0390							-.1040		-.0900
40.000	-.0950	-.0590		-.0310	-.0870	-.0970	-.0930			-.0750
70.000		-.0540	-.0620	-.0600	-.0550	-.0520	-.0700	-.0620		
90.000		-.0480	-.0500	-.0410	-.0320	-.0450	-.0630	-.0540		
105.000				-.0620	-.0390	-.0700	-.0810	-.0660		
110.000									-.0650	
120.000		-.0370	-.0450	.1110	.0260	-.1010	-.1030	-.0740	-.0640	
135.000				.3640	.3280	-.0560	-.0710	-.0450		
150.000		-.0970	-.1100	-.0850	-.0180	-.0870	-.0720	-.0690		
165.000		-.1110		-.0610	.0120	-.0390	-.0630	-.0770		
180.000		-.1150	-.1060	-.0710						

MACH (3) = 3.502 BETAT (1) = -8.750

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5710	.8370	.3470	.0260	-.0160	.0550			.1660		.1000	.0440	.0510	.0330	-.0110
20.000			.4340	.0450	-.0090	.0780			.1420		.1310				
40.000			.6130	.0890	.0810	.0950			.2820		.1800	.1330	.0550	.0040	.0330
55.000			.7130	.1670	.1670	.1590			.2120		.3320				
70.000			.7810	.2300	.1820	.1710			.2150		.3030	.2130	.1080	.0780	.0540
90.000		1.3730	.8040	.2880	.1950	.1920			.1980		.2400	.1590	.1050	.0640	.0370
120.000			.7420	.2850	.2410	.2720			.3660		.1770	.0510	.0360	.0370	.0110

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (3) = 3.502 BETAT (1) = -8.750

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1820					
150.000			.6420	.2580	.2270	.2860			.8470		.0550	.0240	.0130	.0190	.0130
157.000								.9660							
162.000									.9300						
165.000											.0310	.0190	.0180	.0110	.0280
169.000									.8440						
172.000							.8560								
180.000	1.5710	1.1120	.4670	.2330	.1860	.2080			1.0370		-.0250	-.0380	-.0460	-.0650	-.0790

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0150							-.1120		-.0550
45.000	.0220	.0450		.1900	.1740	.0760	.0350			-.0490
75.000		.0030	-.0310	-.0260	-.0110	.0040	-.0060	.0210		
90.000		.0130	-.0150	-.0130	.0480	.0310	.0430	.0700		
105.000				.0640	.0820	.0310	.0630	.0650		
115.000									.0460	
120.000		-.0030	-.0120	.3380	.2510	.0580	.0440	.0740	.0540	
135.000				.2230	.2770	-.0370	-.0540	-.0020		
150.000		.0030	-.0090	.0400	.0690	-.0080	-.0690	-.0060		
165.000		.0080		.0400	.0910	-.0010	.0720	.0370		
180.000		-.0900	-.0830	-.0760						

MACH (3) = 3.502 BETAT (2) = -6.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5970	.8390	.3910	.0180	.0040	.0550			.1410		.0980	.0640	.0480	.0230	-.0050
20.000			.4120	.0380	-.0100	.0710			.0950		.1440				
40.000			.5700	.0390	.0560	.1200			.0960		.2040	.0970	.0470	.0200	.0080
55.000			.6570	.1030	.1300	.1210			.1650		.2980				
75.000			.7150	.1970	.1460	.1320			.1600		.2220	.1720	.0810	.0570	.0360
90.000		1.3180	.7420	.2430	.1580	.1560			.1390		.1710	.0750	.0790	.0530	.0230
120.000			.6990	.2680	.2130	.2300			.3050		.1460	.0220	.0010	.0290	.0060
142.000										.1500					
150.000			.6240	.2540	.2170	.2680			.7920		.0330	.0060	-.0030	-.0030	-.0020
157.000								.9360							
162.000									.8940						
165.000											.0100	-.0080	.0010	-.0110	.0060
169.000									.8400						
172.000							.8670								

AMES 87-757 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (3) = 3.502 BETAT (2) = -6.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.5970	1.1370	.4720	.2250	.1910	.2200			1.0660		-.0330	-.0430	-.0390	-.0590	-.0610
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0290							-.1080		-.0810					
45.000	.0650	.0110		.1530	.1330	.0430	.0080			-.0620					
75.000		-.0160	-.0450	-.0360	-.0270	-.0190	-.0290	.0020							
90.000		-.0040	-.0260	-.0220	.0230	.0460	.0090	.0360							
105.000				.0460	.0550	.0050	.0230	.0370							
110.000									.0340						
120.000		-.0160	-.0240	.2090	.2050	.0650	.0010	.0530	.0460						
135.000				.2480	.2550	-.0440	-.0620	-.0160							
150.000		-.0110	-.0180	.0460	.0710	-.0890	-.0680	-.0180							
165.000		-.0040		.0460	.0830	.0140	.0590	.0310							
180.000		-.0810	-.0680	-.0580											

MACH (3) = 3.502 BETAT (3) = -4.350

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6180	.8400	.3970	.0530	.0250	.0110			.0560		.0640	.0990	.0830	.0420	.0090
20.000			.4160	.0690	.0280	.0360			.0470		.1330				
40.000			.5270	.0690	.0670	.1130			.0520		.2050	.0890	.0510	.0130	.0080
55.000			.6020	.0810	.0980	.1030			.1260		.1670				
70.000			.6470	.1680	.1060	.1050			.1200		.1420	.1140	.0710	.0390	.0180
90.000		1.2570	.6710	.2010	.1200	.1240			.0970		.1280	.0360	.0470	.0380	.0110
120.000			.6480	.2370	.1820	.1930			.2500		.1150	.0060	-.0170	.0090	-.0010
142.000										.1200					
150.000			.5970	.2360	.2030	.2430			.7360		.0250	-.0040	-.0200	-.0220	-.0130
157.000								.9120							
162.000									.8550						
165.000											.0020	-.0220	-.0180	-.0240	-.0110
169.000									.8310						
172.000							.8840								
180.000	1.6180	1.1580	.4790	.2360	.1930	.2230			1.0790		-.0320	-.0420	-.0380	-.0350	-.0470
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0230							-.0630		-.0560					
45.000	-.0630	-.0120		.1030	.0880	.0310	.0080			-.0760					

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (3) = 3.502 BETAT (3) = -4.350

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.1270	-.0520	-.0490	-.0340	-.0070	-.0160	-.0210		
90.000		-.0180	-.0380	-.0320	-.0070	.0090	.0130	.0060		
105.000				.0190	.0190	.0190	.0220	.0130		
111.000									.0210	
120.000		-.0230	-.0320	.1750	.1630	.0080	-.0030	.0180	.0200	
135.000				.2030	.2360	.0090	-.0330	-.0230		
150.000		-.0220	-.0240	.0360	.0850	-.0440	-.0330	-.0230		
165.000		-.0150		.1270	.0940	.0690	.0910	.0350		
180.000		-.0620	-.0600	-.0240						

MACH (3) = 3.502 BETAT (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6370	.8870	.4470	.0640	.0210	.0170			.0570		.0730	.0610	.0760	.0740	.0150
20.000			.4560	.0570	.0190	.0110			.0360		.0610				
40.000			.5060	.0570	.0480	.0540			.0290		.0850	.0680	.0520	.0160	.0020
55.000			.5170	.0660	.0580	.0580			.0710		.0530				
70.000			.5270	.0780	.0560	.0630			.0620		.0710	.0140	.0050	.0110	-.0050
90.000		1.1250	.5450	.1280	.0530	.0730			.0470		.0760	-.0080	-.0230	.0080	-.0110
120.000			.5510	.1570	.1260	.1290			.1630		.0650	-.0270	-.0480	-.0350	-.0160
142.000										.0740					
150.000			.5460	.1840	.1750	.2050			.0320		.0070	-.0280	-.0420	-.0390	-.0340
157.000								.0860							
162.000									.0030						
165.000											-.0240	-.0410	-.0390	-.0350	-.0340
180.000									.0210						
172.000							.9350								
180.000	1.6370	1.1780	.4880	.1850	.1950	.2310			1.0090		-.0370	-.0340	-.0320	-.0310	-.0340

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0190							-.0590		-.0550
40.000	-.0180	-.0390		.0440	.0040	-.0270	-.0330			-.0680
70.000		-.0440	-.0620	-.0620	-.0590	-.0310	-.0520	-.0440		
90.000		-.0340	-.0510	-.0420	-.0330	-.0260	-.0260	-.0250		
105.000				-.0010	-.0130	-.0210	-.0300	-.0200		
111.000									-.0260	
120.000		-.0250	-.0300	.1640	.0950	-.0280	-.0420	-.0320	-.0210	
135.000				.2410	.2240	-.0300	-.0350	-.0140		
150.000		-.0210	-.0230	.0580	.1420	-.0300	.0020	.0280		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (3) = 3.502 BETAT (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0180		.0590	.1330	.0870	.0750	.0210		
180.000		-.0240	-.0160	-.0060						

MACH (3) = 3.502 BETAT (5) = 4.450

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.8070	.8360	.4060	.0550	.0350	.0110			.0590		.0590	.0980	.0790	.0400	.0080
20.000			.3940	.0520	.0130	.0120			.0250		.0570				
40.000			.4000	.0510	.0140	.0120			.0180		.0340	.0150	.0520	.0130	-.0340
55.000			.3920	.0520	.0220	.0250			.0280		.0140				
70.000			.3880	.0550	.0480	.0260			.0190		.0200	-.0360	-.0570	-.0160	-.0240
90.000		.9650	.4040	.0570	.0100	.0250			.0020		-.0060	-.0550	-.0600	-.0460	-.0240
120.000			.4340	.1160	.0720	.0750			.0440		.0000	-.0670	-.0640	-.0610	-.0480
142.000										.0290					
150.000			.4660	.1590	.1400	.1660			.0440		-.0250	-.0650	-.0610	-.0560	-.0510
157.000								.8010							
162.000									.7690						
165.000											-.0620	-.0660	-.0490	-.0420	-.0500
169.000									.8150						
172.000							.8290								
180.000	1.8070	1.1600	.4740	.2080	.1910	.2190			1.0550		-.0480	-.0510	-.0460	-.0380	-.0480

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0220							-.0790		-.0470
40.000	-.0470	-.0640		-.0150	-.0370	-.0620	-.0880			-.0710
70.000		-.0540	-.0670	-.0650	-.0560	-.0620	-.0700	-.0550		
90.000		-.0410	-.0520	-.0460	-.0320	-.0610	-.0700	-.0500		
105.000				.0060	-.0140	-.0620	-.0700	-.0520		
110.000									.0260	
120.000		-.0230	-.0270	.0400	-.0130	-.0610	-.0680	-.0520	-.0460	
135.000				.3840	.2580	-.0610	-.0480	-.0300		
150.000		-.0310	-.0270	.0680	.2500	-.0120	-.0230	.0110		
165.000		-.0480		-.0130	.1490	.0430	.0360	.0250		
180.000		-.0630	-.0560	-.0260						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (3) = 3.502 BETAT (6) = 6.65

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5790	.9270	.3370	.0180	.0060	.0520			.1390		.0880	.0670	.0460	.0140	-.0140
20.000			.3130	.0000	-.0040	.0420			.0690		.0250				
40.000			.3340	.0000	-.0150	.0270			.0090		-.0010	-.0020	-.0040	-.0380	-.0530
55.000			.3460	-.0010	-.0200	-.0020			.0080		.0030				
70.000			.3300	-.0010	-.0210	-.0010			-.0110		.0040	-.0390	-.0530	-.0320	-.0360
90.000		.8840	.3430	.0260	-.0120	-.0010			-.0290		-.0340	-.0660	-.0690	-.0660	-.0350
120.000			.3840	.0690	.0470	.0470			.0110		-.0150	-.0710	-.0820	-.0780	-.0590
142.000										.0960					
150.000			.4320	.1360	.1230	.1480			.0440		-.0250	-.0690	-.0720	-.0670	-.0530
157.000								.7470							
162.000									.0530						
165.000											-.0670	-.0650	-.0580	-.0570	-.0690
169.000									.0930						
172.000							.7680								
180.000	1.5790	1.1410	.4640	.1730	.1840	.2070			1.0350		-.0370	-.0440	-.0530	-.0560	-.0690

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0360							-.1100		-.0590
40.000	-.0720	-.0710		-.0350	-.0420	-.0970	-.1030			-.0710
70.000		-.0680	-.0720	-.0670	-.0610	-.0770	-.0880	-.0540		
90.000		-.0440	-.0530	-.0480	-.0370	-.0730	-.0820	-.0540		
105.000				-.0260	-.0410	-.0710	-.0960	-.0620		
110.000									-.0590	
120.000		-.0290	-.0350	.0660	.0060	-.0990	-.1040	-.0650	-.0590	
135.000				.2970	.2580	-.0640	-.0760	-.0360		
150.000		-.0680	-.0630	-.0120	.0930	-.0660	-.0280	-.0160		
165.000		-.0730		-.0490	.0470	-.0120	-.0490	-.0450		
180.000		-.0910	-.0730	-.0650						

MACH (3) = 3.502 BETAT (7) = 8.84

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5530	.8270	.3440	.0170	-.0110	.0520			.1560		.0930	.0450	.0440	.0300	-.0150
20.000			.3000	.0030	-.0260	.0490			.1050		.0490				
40.000			.3060	.0030	-.0410	.0200			.0240		-.0290	-.0420	-.0510	-.0660	-.0740
55.000			.3030	-.0050	-.0340	-.0200			-.0040		-.0020				
70.000			.2820	-.0110	-.0360	-.0170			-.0270		-.0160	-.0440	-.0560	-.0460	-.0380
90.000		.8190	.2990	.0050	-.0300	-.0180			-.0410		-.0530	-.0770	-.0770	-.0770	-.0380
120.000			.3380	.0620	.0290	.0280			.0060		-.0330	-.0790	-.0870	-.0820	-.0710

AMES 87-7.7 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB13)

MACH (3) = 3.342 BETAT (7) = 8.84.

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.1444	.1675	.1888	.2339	.2682	.1355	.1506	.1581	.1732	.1958	.2239	.2711	.3216	.3953	.5125
PHI															
142.144										-.1677					
152.144			.3944	.1222	.1577	.1234			.3854		-.1377	-.1744	-.1755	-.1677	-.1622
157.144								.8634							
162.144									.7354						
165.144											-.1755	-.1688	-.1611	-.1711	-.1822
169.144									.7711						
172.144							.7577								
182.144	1.5534	1.1194	.4577	.1934	.1777	.1911			1.1144		-.1311	-.1422	-.1566	-.1744	-.1934

X/LB	.5873	.6826	.7384	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.144	-.1422							-.1033		-.1688
48.144	-.1788	-.1815		-.1388	-.1477	-.1844	-.1988			-.1688
72.144		-.1688	-.1738	-.1611	-.1688	-.1544	-.1677	-.1533		
96.144		-.1433	-.1533	-.1555	-.1344	-.1555	-.1677	-.1555		
120.144				-.1222	-.1311	-.1544	-.1677	-.1688		
132.144									-.1555	
144.144		-.1455	-.1544	.1688	-.1322	-.1788	-.1855	-.1677	-.1611	
156.144				.1311	.2144	-.1544	-.1577	-.1433		
168.144		-.1844	-.1911	-.1788	-.1511	-.1622	-.1788	-.1655		
180.144		-.1968		-.1699	-.1536	-.1533	-.1744	-.1788		
192.144		-.2144	-.1933	-.1844						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB14) (15 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.531 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .031 SCALE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .30
RUDDER = -15.000 ELEVON = .00
RUDFLR = .00

MACH (1) = 2.498 BETAT (1) = -8.41

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5125
PHI															
.00	1.3000	.9180	.4600	.0370	.0580	.1870			.0670		.0280	-.0440	-.0110	-.0410	-.0470
20.00			.5370	.0910	.0570	.1290			.1010		.0130				
40.00			.5650	.1940	.1510	.2210			.1490		.0610	.0030	-.0110	-.0220	.1170
55.00			.7010	.2430	.2110	.3980			.2950		.2100				
70.00			.7110	.2440	.1870	.4200			.3310		.2510	.0920	.0110	-.0420	.0040
90.00		1.1480	.6800	.2240	.1750	.2610			.3710		.3190	.0800	-.0060	-.0160	-.0200
120.00			.5970	.2120	.1870	.2570			.4630		.2280	.0430	-.0240	-.0580	-.0530
142.00										.1360					
150.00			.4990	.1580	.1620	.2400			.7190		.0480	-.0050	-.0140	-.0290	-.0560
157.00								.7890							
162.00									.7170						
165.00											-.0530	.0240	.0220	-.0160	-.0560
169.00									.5940						
172.00							.7240								
180.00	1.3000	.8800	.3320	.1210	.1150	.2150			.7540		-.1130	-.1110	-.1270	-.1560	-.1560

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392
PHI										
.00	-.0240							-.1220		-.0960
40.00	.1170	-.0870		.2280	.1710	.1320	.0460			-.1190
70.00		-.0180	-.0370	-.0300	-.0380	.0240	.0000	-.0160		
90.00		-.0130	-.0220	-.0110	.0820	.0490	.0480	.0110		
105.00				.1150	.1480	.1190	.0540	.0000		
110.00									.0150	
120.00		-.0520	-.0560	.4010	.3090	.0700	.0270	.0090	.0020	
135.00				.1450	.1820	-.0680	-.0970	-.0910		
150.00		-.0680	-.0690	-.0130	-.0480	-.1180	-.0970	-.0720		
165.00		-.0590		.0230	.0570	.0030	.0140	.0070		
180.00		-.1260	-.1210	-.0720						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB14)

MACH (1) = 2.490 BETAT (2) = -6.290

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3190	.9190	.4810	.0800	.0990	.1790			.1230		.0550	.0580	.0210	-.0350	-.0570
20.000			.5280	.0990	.1130	.0940			.1220		.0380				
40.000			.6400	.1750	.1580	.1660			.1220		.0560	.0030	-.0210	-.0260	.0580
55.000			.6550	.2080	.1680	.3350			.2510		.1700				
70.000			.6500	.2080	.1390	.3800			.2900		.2220	.0630	-.0120	-.0270	-.0220
90.000		1.1000	.6210	.1780	.1250	.2000			.3390		.2780	.0510	-.0210	-.0360	-.0440
120.000			.5570	.1800	.1440	.2160			.3600		.1950	.0180	-.0330	-.0640	-.0630
142.000										.0880					
150.000			.4780	.1440	.1400	.2150			.6750		-.0230	-.0200	-.0380	-.0430	-.0650
157.000								.7710							
162.000									.6800						
165.000											-.0740	-.0240	-.0030	-.0320	-.0630
169.000									.5960						
172.000							.6750								
180.000	1.3190	.8920	.3360	.1230	.1150	.1890			.7810		-.1150	-.1160	-.0890	-.1400	-.1330

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0290							-.1120		-.0940
40.000	.0060	.0580		.1840	.1370	.1030	-.0210			-.1250
70.000		-.0480	-.0570	-.0530	-.0450	.0010	-.0240	-.0390		
90.000		-.0460	-.0480	-.0300	.0560	.0250	.0130	-.0070		
105.000				.0810	.1100	.0790	.0100	-.0170		
115.000									-.0040	
120.000		-.0640	-.0660	.3130	.2720	.0350	.0050	-.0090	-.0160	
135.000				.1470	.1790	-.0510	-.0930	-.0760		
150.000		-.0710	-.0710	-.0120	.0080	-.1040	-.0840	-.0810		
165.000		-.0680		.0130	.0610	.0410	.0900	.0030		
180.000		-.1040	-.0980	-.0680						

MACH (1) = 2.490 BETAT (3) = -4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3310	.9000	.4230	.0520	.1090	-.0050			.1980		.0920	.0640	.0490	-.0250	-.0780
20.000			.4810	.0750	.1330	-.0040			.1600		.0690				
40.000			.5820	.1310	.1510	.1280			.1330		.0580	.0190	.0010	-.0280	.0220
55.000			.5960	.1560	.1370	.2730			.2150		.1450				
70.000			.5810	.1540	.0990	.2320			.2470		.1910	.0440	-.0260	-.0410	-.0460
90.000		1.0480	.5570	.1310	.0910	.1570			.2480		.2390	.0390	-.0300	-.0490	-.0620
120.000			.5090	.1470	.1180	.1740			.2690		.1530	-.0010	-.0430	-.0630	-.0780

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB14)

MACH (1) = 2.498 BETAT (3) = -4.18

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0400					
150.000			.4550	.1280	.1300	.1970			.6240		-.0420	-.0490	-.0540	-.0520	-.0730
157.000								.7510							
162.000									.6400						
165.000											-.0890	-.0710	-.0290	-.0400	-.0700
169.000									.5950						
172.000							.7160								
180.000	1.3310	.9070	.3400	.1220	.1170	.1750			.7950		-.1200	-.1200	-.0910	-.0960	-.1040
X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0590							-.1000		-.0810					
40.000	.0510	.0280		.1440	.0960	.0570	-.0450			-.1330					
70.000		-.0550	-.0750	-.0690	-.0510	-.0220	-.0480	-.0540							
90.000		-.0620	-.0530	-.0390	.0270	.0420	-.0140	-.0280							
105.000				.0540	.0730	.0430	-.0140	-.0360							
110.000									-.0180						
120.000		-.0710	-.0670	.2430	.2210	.0170	-.0120	-.0250	-.0290						
135.000				.1580	.1990	-.0550	-.0800	-.0800							
150.000		-.0680	-.0630	.0300	.0510	-.0890	-.0530	-.0170							
165.000		-.0670		.0320	.0820	.0570	.0630	-.0140							
180.000		-.0730	-.0700	-.0520											

MACH (1) = 2.498 BETAT (4) = .06

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3450	.9340	.4070	.0530	.0980	-.0030			.1960		.1720	.0970	.0730	-.0230	-.0910
20.000			.4300	.0390	.1220	-.0150			.1950		.1210				
40.000			.4960	.0550	.1060	-.0030			.2090		.0720	.0380	.0340	-.0370	-.0400
55.000			.5010	.0690	.0610	.0600			.1350		.1210				
70.000			.4660	.0700	.0240	.0850			.1030		.1610	.0200	-.0490	-.0600	-.0700
90.000		.9330	.4340	.0550	.0200	.0710			.0850		.1660	.0110	-.0440	-.0680	-.0790
120.000			.4140	.0480	.0580	.0820			.1620		.0460	-.0510	-.0550	-.0730	-.0800
142.000										-.0210					
150.000			.4000	.1010	.1020	.1450			.5200		-.0710	-.1050	-.0920	-.0580	-.0530
157.000								.6970							
162.000									.5800						
165.000											-.1150	-.1170	-.0960	-.0490	-.0420
169.000									.5930						
172.000							.7600								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB14)

MACH (1) = 2.498 BETAT (4) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1959	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3450	.9200	.3440	.1290	.1230	.1770			.7930		-.1290	-.1110	-.1020	-.0640	-.0300

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0930							-.0820		-.0630
40.000	.0200	-.0050		.0410	.0120	-.0100	-.0830			-.0710
70.000		-.0910	-.0930	-.0840	-.0460	-.0480	-.0680	-.0750		
90.000		-.0770	-.0720	-.0150	-.0120	-.0260	-.0490	-.0620		
105.000				.0110	.0170	-.0100	-.0480	-.0650		
110.000									-.0340	
120.000		-.0630	-.0560	.0830	.0880	-.0090	-.0370	-.0420	-.0440	
135.000				.2250	.2220	-.0100	-.0430	-.0100		
150.000		-.0520	-.0530	.0760	.1640	-.0250	.0630	.0170		
165.000		-.0490		.0540	.1670	.1060	.0670	-.0230		
180.000		-.0450	-.0470	-.0450						

MACH (1) = 2.498 BETAT (5) = 4.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3380	.9090	.4460	.0790	.1090	.0680			.1840		.0880	.0530	.0440	-.0270	-.0780
20.000			.4140	.0540	.0990	.0670			.2050		.1060				
40.000			.4100	.0350	.0820	-.0030			.1170		.0690	.0060	-.0050	-.0700	-.0880
55.000			.3960	.0120	.0130	-.0080			.0160		.1010				
70.000			.3440	.0110	-.0180	.0310			.0220		.1220	.0010	-.0490	-.0780	-.0930
90.000		.8090	.3160	-.0120	-.0200	.0270			.0450		.0250	-.0120	-.0540	-.0770	-.0950
120.000			.3180	.0310	.0660	.0280			.0340		-.0210	-.1040	-.0960	-.0760	-.0630
142.000										-.0640					
150.000			.3390	.0650	.0710	.1210			.0160		-.0980	-.1360	-.1220	-.0730	-.0370
157.000								.6460							
162.000									.0490						
165.000											-.1390	-.1410	-.1150	-.0760	-.0400
169.000									.0920						
172.000							.7180								
180.000	1.3380	.9110	.3380	.1170	.1200	.1660			.0820		-.1260	-.1220	-.0950	-.0940	-.1110

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0820							-.0920		-.0830
40.000	-.0180	.0500		-.0430	-.0440	-.0560	-.1290			-.0780

AMES 67-707 IA9 02A + 53 + 79 ORBITER FUSELAGE (RBNB14)

MACH (1, = 2.498 BETAT (5) = 4.31U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
7U.UUU		-.U85U	-.U91U	-.U88U	-.U68U	-.U69U	-.U82U	-.U89U		
9U.UUU		-.U59U	-.U77U	-.U47U	-.U56U	-.U5UU	-.U7UU	-.U79U		
105.UUU				-.U64U	-.U37U	-.U49U	-.U7UU	-.U84U		
11U.UUU									-.U78U	
12U.UUU		-.U7UU	-.U64U	.U71U	.U37U	-.U48U	-.U8UU	-.U6UU	-.U59U	
135.UUU				.3U7U	.23EU	-.U49U	-.U49U	-.U48U		
15U.UUU		-.U55U	-.U56U	.U99U	.252U	.U31U	-.U43U	-.U18U		
155.UUU		-.U58U		-.U24U	.195U	.U88U	.U35U	-.U13U		
18U.UUU		-.U74U	-.U76U	-.U53U						

MACH (1) = 2.498 BETAT (6) = 6.43U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.UUU	1.3130	.923U	.451U	.U79U	.U95U	.151U			.116U		.U51U	.U59U	.U16U	-.U35U	-.U56U
2U.UUU			.416U	.U6UU	.U72U	-.U49U			.19UU		.U55U				
4U.UUU			.392U	.U31U	.U49U	-.U83U			.126U		.U12U	-.U19U	-.U41U	-.U95U	-.U82U
55.UUU			.359U	-.U11U	-.U75U	-.U76U			.U42U		.U76U				
7U.UUU			.3U4U	-.U11U	-.1U1U	-.U62U			.U16U		.U73U	-.U12U	-.U52U	-.U83U	-.U99U
9U.UUU		.752U	.269U	-.U36U	-.1U1U	-.U65U			.U42U		.U14U	-.U45U	-.U61U	-.U83U	-.U94U
12U.UUU			.27EU	-.U21U	-.U79U	-.U51U			.U15U		-.U49U	-.U22U	-.U13U	-.U75U	-.U57U
142.UUU										-.U83U					
15U.UUU			.311U	.U56U	-.UUEU	.U41U			.367U		-.1U8U	-.U46U	-.U3UU	-.U82U	-.U45U
157.UUU								.565U							
152.UUU									.538U						
165.UUU											-.151U	-.U39U	-.U16U	-.U3U	-.U83U
169.UUU									.589U						
172.UUU							.634U								
18U.UUU	1.313U	.9U4U	.334U	.117U	.U63U	.112U			.771U		-.11EU	-.121U	-.U94U	-.142U	-.135U

X/LB	.5873	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.UUU	-.U3UU							-.1U5U		-.U95U
4U.UUU	-.U26U	.1U6U		-.U29U	-.U8UU	-.U68U	-.1U6U			-.U9UU
7U.UUU		-.U81U	-.U95U	-.U95U	-.U78U	-.U7UU	-.1U9U	-.U9UU		
9U.UUU		-.U7UU	-.U81U	-.U54U	-.U61U	-.U59U	-.U75U	-.U83U		
105.UUU				-.U15U	-.U47U	-.U59U	-.U75U	-.U86U		
11U.UUU									-.U87U	
12U.UUU		-.U75U	-.U68U	.U5UU	.U12U	-.U91U	-.U76U	-.U79U	-.U75U	
135.UUU				.4U1U	.269U	-.U91U	-.U77U	-.U66U		
15U.UUU		-.U63U	-.U72U	.U62U	.186U	-.U53U	-.U34U	-.U38U		

AMES 87-767 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB14)

MACH (1) = 2.498 BETAT (6) = 6.450

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0740		-.0490	.1180	.0170	.0210	-.0390		
180.000		-.1030	-.0990	-.0710						

MACH (1) = 2.498 BETAT (7) = 8.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/B	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.2930	.9110	.4390	.0360	.0520	.1950			.0560		.0230	-.0060	-.0190	-.0430	-.0470
20.000			.3930	.0180	.0430	.1630			.0530		.0280				
40.000			.3520	-.0030	.0080	-.0730			.0460		-.0650	-.0680	-.1660	-.1150	-.1120
55.000			.3180	-.0350	-.0400	-.0370			-.0460		-.0460				
70.000			.2570	-.0360	-.0600	-.0260			-.0650		.0300	-.0250	-.0670	-.0660	-.0950
90.000		.6940	.2180	-.0620	-.0590	-.0300			-.0240		-.0620	-.0840	-.0720	-.0930	-.0970
120.000			.2370	-.0190	-.0370	-.0360			.0150		-.0860	-.1440	-.1360	-.0960	-.0640
142.000										-.1080					
150.000			.2790	.0360	.0390	.0280			.0360		-.1290	-.1600	-.1460	-.1040	-.0870
157.000								.5040							
162.000									.5150						
165.000											-.1680	-.1570	-.1300	-.1460	-.1440
169.000									.5690						
172.000							.5220								
180.000	1.2930	.8920	.3280	.1080	.1120	.1880			.7420		-.1190	-.1240	-.1310	-.1620	-.1680

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0310							-.1290		-.1130
40.000	-.0690	-.0260		-.1060	-.0460	-.1210	-.1230			-.1010
70.000		-.0820	-.1030	-.1020	-.0830	-.0850	-.1250	-.0980		
90.000		-.0690	-.0860	-.0680	-.0620	-.0760	-.0940	-.0950		
105.000				-.0290	-.0620	-.0780	-.0930	-.1060		
110.000									-.1050	
120.000		-.0850	-.0780	.0860	.0110	-.1190	-.1180	-.1020	-.0930	
135.000				.3770	.3120	-.1210	-.0820	-.0700		
150.000		-.1090	-.1210	-.0460	-.0680	-.1180	-.0830	-.1020		
165.000		-.1330		-.0800	.0070	-.0830	-.0220	-.1150		
180.000		-.1330	-.1260	-.0750						

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB14)

MACH (2) = 2.999 BETAT (1) = -8.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3100	.7800	.3730	.0330	.0030	.0640			.1360		.0350	.0240	.0270	-.0180	-.0190
20.000			.4300	.0600	.0150	.1550			.1670		.0680				
40.000			.5770	.1500	.0930	.3720			.2070		.0890	.0650	-.0020	-.0030	.0320
55.000			.6490	.2210	.1660	.3910			.3500		.2460				
70.000			.6880	.2290	.1630	.2090			.4120		.2920	.1330	.0480	.0260	.0160
90.000		1.1580	.6820	.2340	.1600	.2110			.2510		.3260	.1340	.0440	.0150	-.0010
120.000			.5980	.2230	.1810	.2250			.3240		.1810	.0650	.0240	-.0190	-.0360
142.000										.1260					
150.000			.4980	.1730	.1580	.2140			.6760		.0120	-.0070	-.0010	-.0050	-.0210
157.000								.7560							
162.000									.7110						
165.000											-.0180	-.0080	.0040	.0180	-.0190
169.000									.6230						
172.000							.6650								
180.000	1.3110	.8840	.3410	.1300	.1160	.1360			.7810		-.0690	-.0750	-.0810	-.0980	-.1180

X/LB	.5873	.6626	.7385	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0350							-.0880		-.0830
40.000	.0670	.0850		.2070	.1670	.1360	.0560			-.0750
70.000		-.0240	-.0450	-.0390	-.0270	.0360	.0240	.0420		
90.000		-.0150	-.0330	-.0280	.0650	.0480	.0580	.0650		
105.000				.0580	.0940	.1190	.0720	.0340		
111.000									.0880	
120.000		-.0370	-.0420	.3050	.2450	.1160	.0570	.0390	.0290	
135.000				.1570	.1900	-.0210	-.0470	-.0480		
150.000		-.0420	-.0470	-.0070	.0130	-.0860	-.0680	-.0320		
165.000		-.0390		.0110	.0400	.0440	.0750	.0060		
180.000		-.1090	-.0990	-.0740						

MACH (2) = 2.909 BETAT (2) = -6.410

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3340	.8120	.3940	.0490	.0100	.0190			.1530		.0440	.0280	.0610	-.0050	-.0270
20.000			.4450	.0630	.0480	.0440			.1940		.0630				
40.000			.5510	.1360	.0780	.3620			.1910		.1090	.0630	-.0010	-.0130	-.0060
55.000			.6010	.1830	.1320	.1720			.3130		.2150				
70.000			.6290	.1820	.1250	.1670			.1610		.2690	.1140	.0320	.0110	-.0070
90.000		1.1130	.6270	.1810	.1220	.1660			.1830		.2840	.1180	.0320	.0020	-.0190
120.000			.5610	.1950	.1520	.1860			.2700		.1210	.0340	.0140	-.0270	-.0420

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RB:B14)

MACH (2) = 2.999 BETAT (2) = -6.41U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.092U					
150.000			.480U	.158U	.144U	.196U			.633U		-.005U	-.025U	-.023U	-.019U	-.033U
157.000								.735U							
162.000									.677U						
165.000											-.031U	-.033U	-.025U	-.001U	-.024U
169.000									.616U						
172.000							.665U								
180.000	1.334U	.901U	.344U	.131U	.119U	.150U			.792U		-.007U	-.008U	-.007U	-.004U	-.009U

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.052U							-.124U		-.079U
40.000	.064U	.064U		.167U	.135U	.054U	-.009U			-.089U
70.000		-.041U	-.064U	-.055U	-.042U	-.033U	-.044U	-.022U		
90.000		-.036U	-.051U	-.044U	.022U	-.009U	-.012U	.015U		
105.000				.028U	.045U	.055U	.062U	.014U		
110.000									.059U	
120.000		-.049U	-.056U	.237U	.191U	.023U	-.007U	.018U	.007U	
135.000				.142U	.171U	-.077U	-.095U	-.055U		
150.000		-.051U	-.060U	-.018U	.005U	-.127U	-.111U	-.052U		
165.000		-.051U		-.005U	.034U	-.032U	.027U	-.001U		
180.000		-.092U	-.089U	-.055U						

MACH (2) = 2.999 BETAT (3) = -4.25U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.357U	.842U	.395U	.045U	.050U	-.024U			.146U		.109U	.054U	.006U	.021U	-.029U
20.000			.456U	.068U	.050U	-.024U			.237U		.088U				
40.000			.532U	.128U	.048U	.078U			.166U		.096U	.053U	.007U	-.014U	-.012U
55.000			.555U	.152U	.118U	.133U			.260U		.178U				
70.000			.570U	.151U	.091U	.126U			.141U		.232U	.088U	.014U	-.008U	-.026U
90.000		1.164U	.568U	.153U	.088U	.126U			.124U		.217U	.084U	.016U	-.013U	-.036U
120.000			.518U	.167U	.126U	.150U			.211U		.085U	-.009U	-.007U	-.031U	-.051U
142.000										.064U					
150.000			.466U	.148U	.132U	.175U			.585U		-.018U	-.039U	-.049U	-.036U	-.047U
157.000								.714U							
162.000									.644U						
165.000											-.044U	-.054U	-.046U	-.026U	-.036U
169.000									.611U						
172.000							.681U								

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AMES 87-7\7 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RB\B14)

MACH (2) = 2.999 BETA (3) = -4.25

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3570	.9190	.3540	.1360	.1190	.1490			.8180		-.0750	-.0840	-.0760	-.0710	-.0890
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0590							-.0770		-.0650					
4.000	.0350	.0430		.1330	.0990	.0540	.0460			-.0990					
7.000		-.0630	-.0880	-.0730	-.0550	-.0220	-.0290	-.0440							
9.000		-.0540	-.0580	-.0610	-.0130	-.0030	-.0020	-.0090							
105.000				-.0210	.0020	-.0430	.0110	-.0130							
111.000									.0340						
120.000		-.0520	-.0660	.1530	.1380	.0190	.0070	-.0020	-.0480						
135.000				.1250	.1540	-.0390	-.0640	-.0490							
150.000		-.0580	-.0620	-.0150	.0210	-.0750	-.0630	-.0550							
165.000		-.0550		-.0610	.0350	.0310	.0440	-.0150							
180.000		-.0720	-.0670	-.0610											

MACH (2) = 2.999 BETA (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3840	.8410	.4140	.1410	.1420	-.0290			.0770		.1550	.1190	.1010	.0390	-.0280
2.000			.4260	.1480	.1410	-.0260			.0660		.1350				
4.000			.4580	.1810	.0370	.0310			.1240		.1180	.0460	.0230	.0260	-.0330
55.000			.4570	.1690	.0460	.0530			.0550		.1290				
7.000			.4510	.1890	.0300	.0570			.1630		.0910	.0570	-.0070	-.0300	-.0480
9.000		.9460	.4440	.1770	.0270	.0560			.0360		.0730	.0670	-.0070	-.0350	-.0540
120.000			.4260	.1110	.0720	.0810			.1250		.0320	-.0560	-.0610	-.0360	-.0580
142.000										.0150					
150.000			.4080	.1180	.1060	.1360			.4910		-.0410	-.0680	-.0770	-.0610	-.0460
157.000								.6940							
162.000									.5920						
165.000											-.0680	-.0800	-.0750	-.0650	-.0380
169.000									.6110						
172.000							.7530								
180.000	1.3840	.9410	.3570	.1370	.1230	.1580			.8230		-.0840	-.0770	-.0720	-.0620	-.0460
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0650							-.1240		-.0710					
4.000	-.0570	.0110		.0900	.0130	-.0240	-.0630			-.1110					

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNS14)

MACH (2) = 2.999 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0810	-.0930	-.0890	-.0660	-.0860	-.0950	-.0660		
90.000		-.0720	-.0840	-.0580	-.0500	-.0680	-.0740	-.0490		
105.000				-.0330	-.0360	-.0510	-.0690	-.0490		
110.000									-.0470	
120.000		-.0680	-.0530	.0340	.0390	-.0780	-.0610	-.0300	-.0270	
135.000				.1790	.1720	-.0810	-.0890	-.0280		
150.000		-.0440	-.0460	.0420	.1320	-.0670	-.0460	-.0130		
165.000		-.0370		.0180	.1190	.0490	.0200	-.0120		
180.000		-.0320	-.0380	-.0340						

MACH (2) = 2.999 BETAT (5) = 4.38

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3530	.8650	.4010	.0440	.0400	-.0200			.1430		.1100	.0510	.0720	.0150	-.0330
20.000			.3960	.0410	.0400	-.0220			.0520		.1370				
40.000			.4160	.0460	.0230	-.0200			-.0070		.0660	.0440	.0090	-.0280	-.0680
55.000			.3970	.0430	.0040	-.0030			-.0040		.0220				
75.000			.3530	.0410	-.0150	.0160			.0150		.0120	-.0300	-.0170	-.0460	-.0640
90.000		.8070	.3270	.0170	-.0180	.0130			-.0020		.0130	-.0550	-.0590	-.0410	-.0620
125.000			.3320	.0540	.0220	.0340			.0230		-.0160	-.0820	-.0860	-.0730	-.0470
142.000										-.0240					
150.000			.3460	.0870	.0770	.1070			.0880		-.0600	-.0960	-.0940	-.0780	-.0420
157.000								.6210							
162.000									.5710						
165.000											-.0950	-.0970	-.0840	-.0740	-.0620
169.000									.6050						
172.000							.6510								
180.000	1.3530	.9280	.3480	.1290	.1180	.1460			.7970		-.0810	-.0850	-.0750	-.0720	-.0930

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0630							-.1080		-.0760
40.000	-.0880	-.0220		-.0025	-.0300	-.0760	-.1180			-.0670
75.000		-.0830	-.0870	-.0820	-.0720	-.0880	-.0940	-.0710		
90.000		-.0710	-.0810	-.0610	-.0630	-.0660	-.0780	-.0630		
105.000				-.0320	-.0470	-.0640	-.0810	-.0660		
110.000									-.0630	
120.000		-.0460	-.0570	.0390	-.0070	-.0980	-.0890	-.0540	-.0460	
135.000				.1930	.1980	-.1000	-.0730	-.0480		
150.000		-.0390	-.0420	.0690	.2130	.0060	-.0520	-.0140		

AMES 87-757 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB14)

MACH (2) = 2.999 BETAT (5) = 4.38

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0446		-.0336	.1216	.0526	.0196	.0196		
180.000		-.0756	-.0716	-.0646						

MACH (2) = 2.999 BETAT (6) = 6.55

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3276	.8196	.3756	.0316	.0176	.0186			.1516		.0496	.0286	.0396	-.0116	-.0316
20.000			.3616	.0176	.0166	-.0096			.1096		.0736				
40.000			.3606	.0226	-.0086	-.0286			.0816		.0316	-.0146	-.0136	-.0556	-.0846
55.000			.3426	.0146	-.0216	-.0196			-.0076		.0116				
70.000			.2976	.0146	-.0376	-.0496			-.0216		.0096	-.0336	-.0276	-.0516	-.0686
90.000		.7416	.2746	-.0496	-.0396	-.0496			-.0166		-.0486	-.0636	-.0686	-.0476	-.0686
120.000			.2386	.0326	.0036	.0096			-.0496		-.0386	-.0956	-.0996	-.0836	-.0466
142.000										-.0436					
150.000			.3176	.0726	.0536	.0876			.3306		-.0706	-.1066	-.1036	-.0886	-.0546
157.000								.5596							
162.000									.5606						
165.000											-.1056	-.1026	-.0916	-.0876	-.0956
169.000									.5956						
172.000							.3876								
180.000	1.3276	.9106	.3426	.1256	.1146	.1326			.7846		-.0786	-.0856	-.0886	-.1046	-.1216

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0516							-.0796		-.0766
40.000	-.0876	-.0296		-.0186	-.0556	-.0486	-.0696			-.0766
70.000		-.0636	-.0876	-.0826	-.0766	-.0696	-.0776	-.0766		
90.000		-.0746	-.0796	-.0636	-.0546	-.0576	-.0706	-.0736		
105.000				-.0326	-.0466	-.0556	-.0696	-.0756		
115.000									-.0716	
120.000		-.0556	-.0686	-.0636	-.0476	-.0866	-.0816	-.0736	-.0616	
135.000				.3336	.2366	-.0456	-.0656	-.0656		
150.000		-.0616	-.0676	.0186	.1296	-.0626	-.0586	-.0316		
165.000		-.0916		-.0466	.0656	-.0166	.0066	-.0136		
180.000		-.0986	-.0946	-.0566						

AMES 87-707 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNB14)

MACH (2) = 2.999 BETAT (7) = 8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3000	.7720	.3480	.0210	.0030	.0630			.1390		.0330	.0180	.0210	-.0220	-.0500
20.000			.3190	.0090	.0010	.0100			.0910		.0680				
40.000			.3100	-.0010	-.0290	-.0160			.0260		-.0340	-.0610	-.0750	-.0880	-.0970
55.000			.2830	-.0160	-.0410	-.0270			-.0190		-.0650				
75.000			.2420	-.0170	-.0550	-.0310			-.0150		.0090	-.0410	-.0600	-.0590	-.0720
90.000		.6740	.2240	-.0350	-.0570	-.0310			-.0400		-.0330	-.0740	-.0800	-.0550	-.0690
120.000			.2460	.0070	-.0150	-.0170			.0000		-.0700	-.1130	-.1100	-.0890	-.0490
142.000										-.0580					
150.000			.2860	.0540	.0480	.0400			.2890		-.0860	-.1200	-.1060	-.0900	-.0840
157.000								.4910							
162.000									.5430						
165.000											-.1220	-.1150	-.0940	-.1060	-.1190
169.000									.5770						
172.000							.5220								
180.000	1.3000	.8930	.3330	.1180	.1090	.1370			.7600		-.0820	-.0890	-.0960	-.1090	-.1320

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0370							-.1190		-.0870
40.000	-.0890	-.0490		-.0480	-.0940	-.1040	-.1130			-.0750
70.000		-.0780	-.0870	-.0850	-.0840	-.0970	-.1130	-.0790		
90.000		-.0710	-.0740	-.0700	-.0560	-.0880	-.1140	-.0760		
105.000				-.0300	-.0550	-.0880	-.1120	-.0790		
110.000									-.0820	
120.000		-.0630	-.0710	.0560	.0000	-.1210	-.1140	-.0820	-.0690	
135.000				.2720	.1940	-.0740	-.0840	-.0510		
150.000		-.1060	-.1080	-.0660	-.0920	-.1210	-.1090	-.0770		
165.000		-.1230		-.0860	-.0620	-.0730	-.0700	-.0860		
180.000		-.1210	-.1060	-.0840						

MACH (3) = 3.502 BETAT (1) = -8.730

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3440	.7380	.3320	.0230	-.0080	.0360			.1600		.0680	.0250	.0200	.0110	-.0360
20.000			.3020	.0300	-.0010	.0670			.1670		.0930				
40.000			.3520	.0480	.0750	.1050			.2660		.1300	.0850	.0270	-.0210	.0170
55.000			.6410	.1330	.1500	.1770			.4080		.2680				
75.000			.6910	.1900	.1550	.1810			.1990		.3300	.1620	.0700	.0410	.0190
90.000		1.1890	.6940	.2380	.1560	.1730			.1950		.2740	.1500	.0660	.0280	.0050
120.000			.6100	.2370	.1800	.2100			.2730		.1360	.0330	.0360	.0010	-.0270

AMES 07-7x7 IA9 02A + 33 + 79 ORBITER FUSELAGE (RBNB14)

MACH (3) = 3.962 BETAT (1) = -8.73x

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.xxxx	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.xxx										.1320					
150.xxx			.5060	.1790	.1540	.2030			.6630		.0220	-.0110	-.0130	-.0050	-.0180
157.xxx								.7550							
162.xxx									.7220						
165.xxx											.0010	-.0050	-.0120	.0080	-.0050
169.xxx									.6520						
172.xxx							.5740								
180.xxx	1.3440	.9120	.3490	.1500	.1150	.1250			.7900		-.0470	-.0580	-.0710	-.0760	-.0980

X/LB	.5873	.6625	.7380	.7859	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.xxx	-.0310							-.0720		-.1680
4x.xxx	.0270	.0650		.1870	.1530	.0970	.0670			-.0540
7x.xxx		-.0220	-.0490	-.0380	-.0310	.0250	.0320	.0480		
9x.xxx		-.0160	-.0350	-.0330	.0210	.0490	.0490	.0450		
115.xxx				.0240	.0590	.0630	.0770	.0460		
11x.xxx									.0520	
12x.xxx		-.0410	-.0440	.2530	.2130	.0530	.0770	.0480	.0390	
135.xxx				.1470	.1800	.0490	-.0360	-.0320		
150.xxx		-.0330	-.0430	-.0070	.0140	-.0660	-.0530	-.0410		
165.xxx		-.0350		-.0020	.0290	-.0030	.0570	-.0010		
18x.xxx		-.0660	-.0990	-.0830						

MACH (3) = 3.962 BETAT (2) = -5.53x

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.xxxx	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.xxx	1.3810	.9070	.3940	.1530	.1010	.1280			.6910		.0730	.0220	.0080	.0080	-.0280
2x.xxx			.4330	.1620	.0990	.0570			.6910		.0930				
4x.xxx			.5360	.1620	.0690	.1010			.2190		.1270	.0770	.0140	-.0150	-.0150
55.xxx			.5950	.1970	.1250	.1240			.1340		.2240				
7x.xxx			.6300	.1540	.1170	.1320			.1490		.1750	.1250	.0430	.0190	-.0030
9x.xxx		1.1440	.6360	.1990	.1220	.1310			.1340		.1710	.0940	.0380	.0080	-.0140
12x.xxx			.5710	.2220	.1490	.1730			.2570		.0920	-.0060	.0000	-.0120	-.0360
142.xxx										.1010					
150.xxx			.4900	.1680	.1460	.1810			.6130		-.0050	-.0310	-.0340	-.0240	-.0320
157.xxx								.7320							
162.xxx									.6850						
165.xxx											-.0240	-.0480	-.0340	-.0220	-.0160
169.xxx									.6430						
172.xxx							.6990								

AMES 87-7.7 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RUN 14)

MACH (3) = 3.50 BETAT (2) = -6.53

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3810	.9400	.3580	.1530	.1190	.1340			.8490		-.1630	-.1720	-.1660	-.1780	-.1690

X/LB	.5073	.5626	.7380	.7869	.8283	.8848	.9262	.9539	1.0015	1.0392
PHI										
.000	-.1390							-.1770		-.1780
4.000	-.1210	.1450		.1680	.1170	.0710	.0330			-.1
7.000		-.1390	-.1620	-.1530	-.1460	-.1060	-.1090	-.1170		
9.000		-.1350	-.1590	-.1450	-.1060	.0110	.0180	.0150		
155.000				.1650	.1190	.0570	.0430	.0150		
11.000									.0270	
12.000		-.1490	-.1540	.1890	.1660	.1220	.0430	.1220	.0150	
135.000				.1240	.1650	-.1270	-.1520	-.1430		
15.000		-.1420	-.1530	-.1150	.1090	-.1760	-.1630	-.1450		
165.000		-.1420		-.1190	.1160	-.1110	.1420	-.1980		
18.000		-.1980	-.1820	-.1620						

MACH (3) = 3.50 BETAT (3) = -4.34

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0148	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3990	.8970	.4320	.1490	.1190	-.1320			.1220		.1250	.1490	.1220	.1350	-.1150
2.000			.4710	.1720	.1150	-.1130			.1010		.1990				
4.000			.5510	.1710	.1580	.0850			.1240		.1270	.1480	.1110	-.1130	-.1270
55.000			.5660	.1660	.1120	.0990			.1180		.1840				
7.000			.5760	.1150	.1920	.0910			.1190		.1390	.1120	.1280	.0950	-.1170
9.000		1.0890	.5750	.1560	.1920	.0970			.1920		.1190	.1470	.1230	-.1020	-.1270
12.000			.5280	.1560	.1260	.1390			.1490		.1560	-.1240	-.1290	-.1170	-.1390
142.000										.1740					
15.000			.4660	.1570	.1330	.1650			.5660		-.1160	-.1410	-.1450	-.1390	-.1480
157.000								.7120							
162.000									.6560						
165.000											-.1340	-.1520	-.1420	-.1450	-.1330
169.000									.6370						
172.000							.7130								
180.000	1.3990	.9530	.3620	.1580	.1220	.1420			.8280		-.1610	-.1730	-.1630	-.1640	-.1650

X/LB	.5073	.5626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.1420							-.1830		-.1650
4.000	-.1130	.1310		.1230	.1740	.1210	-.1010			-.1790

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DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNB14)

AMES 87-7\7 IA9 OEA + S3 + T9 ORBITER FUSELAGE

MACH (3) = 3.502 BETAT (3) = -4.34\

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6626	.738\	.7869	.8283	.8848	.9262	.9639	1.\\15	1.\392
PHI										
7\.\\\		-.\51\	-.\72\	-.\65\	-.\51\	-.\38\	-.\39\	-.\36\		
9\.\\\		-.\47\	-.\62\	-.\58\	-.\29\	-.\38\	-.\16\	-.\\7\		
115.\\\				-.\2\\	-.\2\\	-.\39\	-.\2\\	-.\\8\	.\14\	
11\.\\\									-.\\2\	
12\.\\\		-.\55\	-.\61\	.14\\	.1\9\	-.\19\	-.\\4\	.\\4\		
135.\\\				.\86\	.139\	-.\58\	-.\71\	-.\44\		
15\.\\\		-.\48\	-.\55\	-.\1\\	.\\7\	-.\7\\	-.\71\	-.\54\		
165.\\\		-.\42\		-.\12\	.\1\\	-.\\2\	.\\\\	-.\19\		
18\.\\\		-.\73\	-.\69\	-.\59\						

MACH (3) = 3.5\2 BETAT (4) = .\5\

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.\\\\	.\\75	.\188	.\339	.\5\2	.1355	.15\6	.1581	.1732	.1958	.2259	.2711	.32\\	.3953	.512\
PHI															
.\\\	1.415\	.971\	.473\	.\69\	.\29\	-.\24\			-.\11\		.\82\	.1\4\	.\6\\	.\67\	.\\\\
2\.\\\			.49\\	.\81\	.\21\	-.\3\\			-.\23\		.\89\				
4\.\\\			.545\	.\79\	.\5\\	-.\\3\			-.\17\		.128\	.\56\	.\17\	.\\6\	-.\22\
55.\\\			.535\	.\87\	.\69\	.\44\			.\47\		.\41\				
7\.\\\			.487\	.\94\	.\53\	.\45\			.\53\		.\35\	.\\2\	.\14\	-.\19\	-.\37\
9\.\\\		.977\	.462\	.\94\	.\48\	.\57\			.\42\		.\57\	-.\17\	-.\32\	-.\17\	-.\41\
12\.\\\			.436\	.\93\	.\82\	.\91\			.\84\		.\31\	-.\38\	-.\53\	-.\45\	-.\46\
142.\\\										.\32\					
15\.\\\			.42\\	.123\	.1\9\	.134\			.474\		-.\25\	-.\49\	-.\62\	-.\6\\	-.\42\
157.\\\								.678\							
162.\\\									.61\\		-.\44\	-.\61\	-.\61\	-.\57\	-.\44\
165.\\\									.629\						
169.\\\							.7\\\								
172.\\\									.843\		-.\6\\	-.\6\\	-.\58\	-.\53\	-.\5\\
18\.\\\	1.415\	.968\	.367\	.127\	.125\	.149\									

X/LB	.5873	.6626	.738\	.7869	.8283	.8848	.9262	.9639	1.\\15	1.\392
PHI								-.\73\		-.\51\
.\\\	-.\4\\									-.\88\
4\.\\\	-.\35\	-.\47\		.\29\	-.\58\	-.\34\	-.\51\			
7\.\\\		-.\68\	-.\79\	-.\76\	-.\65\	-.\7\\	-.\74\	-.\58\		
9\.\\\		-.\61\	-.\74\	-.\6\\	-.\56\	-.\59\	-.\55\	-.\42\		
115.\\\				-.\31\	-.\4\\	-.\59\	-.\53\	-.\41\		
11\.\\\									-.\58\	
12\.\\\		-.\56\	-.\68\	.\36\	.\38\	-.\58\	-.\51\	-.\4\\	-.\3\\	
135.\\\				.154\	.135\	-.\58\	-.\63\	-.\39\		
15\.\\\		-.\42\	-.\43\	.\27\	.\97\	-.\59\	-.\39\	-.\\7\		

AMES 87-767 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB14)

MACH (3) = 3.502 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9839	1.0015	1.0392
PHI										
185.000		-.0380		-.0410	.0790	.0370	.0230	-.0070		
180.000		-.0330	-.0330	-.0280						

MACH (3) = 3.502 BETAT (5) = 4.45

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3940	.8960	.4310	.0530	.0210	-.0280			.0360		.0670	.0620	.0390	.0360	-.0110
2.000			.4280	.0580	.0220	-.0230			-.0120		.0680				
4.000			.4540	.0560	.0210	-.0270			-.0150		.0370	.0340	.0290	-.0010	-.0420
55.000			.4340	.0560	.0240	.0070			-.0030		-.0050				
7.000			.3780	.0580	.0090	.0110			.0190		-.0080	-.0350	-.0380	-.0310	-.0450
9.000		.8430	.3470	.0560	.0050	.0170			.0000		.0090	-.0420	-.0560	-.0410	-.0490
12.000			.3470	.0740	.0380	.0420			-.0010		-.0050	-.0590	-.0670	-.0660	-.0480
142.000										-.0010					
15.000			.3610	.0990	.0820	.1030			.0710		-.0370	-.0650	-.0730	-.0650	-.0550
157.000								.6190							
182.000									.0970						
185.000											-.0650	-.0700	-.0670	-.0590	-.0590
189.000									.0270						
172.000							.6320								
180.000	1.3940	.9610	.3620	.1380	.1220	.1410			.0210		-.0540	-.0660	-.0610	-.0590	-.0650

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9839	1.0015	1.0392
PHI										
.000	-.0410							-.0700		-.0380
40.000	-.0480	-.0680		-.0300	-.0250	-.0400	-.0800			-.0670
70.000		-.0720	-.0810	-.0780	-.0690	-.0710	-.0900	-.0590		
90.000		-.0810	-.0710	-.0650	-.0620	-.0540	-.0660	-.0680		
105.000				-.0320	-.0420	-.0540	-.0690	-.0640		
110.000									-.0010	
120.000		-.0410	-.0440	.0520	-.0410	-.0680	-.0690	-.0650	-.0560	
135.000				.1240	.1430	-.0470	-.0700	-.0460		
150.000		-.0350	-.0390	.0440	.1770	-.0140	-.0270	-.0190		
165.000		-.0490		-.0300	.0730	.0440	.0170	.0150		
180.000		-.0740	-.0680	-.0570						

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-737 IA9 OEA + 93 + T9 ORBITER FUSELAGE (RBNB14)

MACH (3) = 3.502 BETAT (6) = 5.66U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3580	.9000	.3810	.0370	.0070	-.0030			.0890		.0680	.0370	.0250	.0140	-.0270
2.000			.3840	.0330	-.0070	-.0190			.0440		.0740				
4.000			.3700	.0330	-.0080	-.0250			-.0220		.0060	-.0160	-.0340	-.0460	-.0690
55.000			.3480	.0320	-.0060	-.0080			-.0110		-.0150				
7.000			.3030	.0320	-.0180	-.0050			.0420		-.0150	-.0590	-.0540	-.0420	-.0520
9.000		.7590	.2850	.0110	-.0210	-.0060			-.0210		-.0220	-.0590	-.0710	-.0590	-.0540
12.000			.2960	.0450	.0150	.0150			-.0260		-.0330	-.0790	-.0830	-.0760	-.0580
142.000										-.0190					
15.000			.3240	.0820	.0660	.0910			.3160		-.0520	-.0830	-.0810	-.0760	-.0650
157.000								.5840							
162.000									.5780						
165.000											-.0820	-.0830	-.0730	-.0720	-.0820
169.000									.6070						
172.000							.5820								
180.000	1.3580	.9460	.3510	.1290	.1150	.1270			.7920		-.0590	-.0670	-.0690	-.0810	-.0970

X/LB	.5873	.6626	.7390	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0460							-.0870		-.0690
40.000	-.0770	-.0670		-.0440	-.0420	-.0690	-.0760			-.0630
75.000		-.0750	-.0850	-.0780	-.0720	-.0750	-.0760	-.0670		
90.000		-.0670	-.0740	-.0580	-.0640	-.0640	-.0770	-.0710		
105.000				-.0380	-.0520	-.0530	-.0760	-.0710		
115.000									-.0280	
120.000		-.0450	-.0570	.0000	-.0530	-.0860	-.0770	-.0730	-.0670	
135.000				.2780	.2520	-.0440	-.0540	-.0580		
150.000		-.0550	-.0770	-.0190	.0430	-.0730	-.0570	-.0330		
165.000		-.0890		-.0550	.0080	-.0620	-.0610	-.0470		
180.000		-.0940	-.0880	-.0650						

MACH (3) = 3.5 2 BETAT (7) = 8.86U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3240	.7330	.3340	.0210	.0070	.0350			.1580		.0540	.0220	.0320	.0060	-.0350
2.000			.3590	.0110	-.0220	.0190			.0720		.0270				
4.000			.2990	.0090	-.0300	-.0160			-.0360		-.0250	-.0550	-.0700	-.0800	-.0890
55.000			.2750	.0080	-.0290	-.0260			-.0230		-.0210				
7.000			.2330	-.0150	-.0420	-.0270			-.0180		-.0320	-.0480	-.0560	-.0570	-.0610
9.000		.6810	.2250	-.0170	-.0450	-.0260			-.0410		-.0460	-.0670	-.0710	-.0650	-.0620
12.000			.2490	.0190	-.0060	-.0080			-.0460		-.0590	-.0860	-.0930	-.0860	-.0680

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB14)

MACH (3) = 3.502 BETAT (7) = 0.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										-.0360					
150.000			.2890	.0620	.0510	.0590			.2750		-.0590	-.0890	-.0920	-.0820	-.0750
157.000								.5180							
162.000									.5570						
165.000											-.0860	-.0880	-.0820	-.0920	-.0970
169.000									.5830						
172.000							.5330								
180.000	1.3240	.9140	.3400	.1180	.1080	.1150			.7660		-.0540	-.0660	-.0840	-.0890	-.1090

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0300							-.1180		-.0730
45.000	-.0880	-.0740		-.0550	-.0520	-.1070	-.1140			-.0740
75.000		-.0770	-.0860	-.0790	-.0750	-.0990	-.1160	-.0660		
90.000		-.0650	-.0740	-.0700	-.0580	-.0910	-.1000	-.0690		
105.000				-.0390	-.0570	-.0960	-.1110	-.0790		
115.000									-.0620	
120.000		-.0510	-.0650	.0560	.0420	-.1080	-.1100	-.0810	-.0700	
135.000				.1110	.0640	-.0860	-.0860	-.0500		
150.000		-.0980	-.1040	-.0850	-.0920	-.1130	-.1140	-.0810		
165.000		-.1100		-.0870	-.0760	-.0740	-.0770	-.0690		
180.000		-.1080	-.1020	-.0900						

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AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB15) (15 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0500 SCALE

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

MACH (1) = 2.498 BETAT (1) = -8.390

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2440	.9070	.4480	.0660	.0650	.1220			.0450		.0360	-.0110	-.0210	-.0380	-.0430
2.000			.5250	.0960	.0640	.0580			.0620		-.0060				
4.000			.6570	.1990	.1520	.1890			.1060		.0330	-.0200	-.0230	-.0170	.0950
55.000			.7110	.2510	.2040	.3050			.2590		.1630				
70.000			.6920	.2480	.1760	.3690			.2910		.2160	.0730	-.0070	-.0170	-.0620
90.000		1.0000	.6440	.2120	.1640	.3690			.3070		.2980	.0630	-.0230	-.0370	-.0290
120.000			.5500	.1840	.1540	.2200			.4860		.1690	.0250	-.0420	-.0730	-.0740
142.000										.1440					
150.000			.4470	.1240	.1180	.2230			.6330		-.0620	-.0460	-.0460	-.0500	-.0730
157.000								.6740							
162.000									.6420						
165.000											-.0580	.0160	.0010	-.0350	-.0750
169.000									.5310						
172.000							.5600								
180.000	1.2440	.8060	.2860	.0870	.0700	.1820			.6690		-.1260	-.1160	-.1510	-.1700	-.1570

X/L3	.5873	.6625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0210							-.1090		-.0840
4.000	.1080	.0980		.2230	.1800	.1400	.0300			-.1170
75.000		-.0230	-.0430	-.0430	-.0570	.0130	-.0690	-.0240		
90.000		-.0210	-.0320	-.0240	.0760	.0310	.0280	.0050		
105.000				.0970	.1410	.1070	.0230	-.0180		
110.000									-.0220	
120.000		-.0680	-.0690	.4260	.3200	.0630	.0150	-.0610	-.0480	
135.000				.1010	.1350	-.0990	-.1180	-.1020		
150.000		-.0810	-.0810	-.0330	-.0430	-.1330	-.1250	-.1140		
165.000		-.0680		.0060	.0320	-.0330	.0740	-.0690		
180.000		-.1280	-.1190	-.0910						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBN815)

MACH (1) = 2.498 BETAT (2) = -6.280

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2840	.9280	.3050	.1110	.0750	.1030			.1230		.0660	.0340	.0110	-.0480	-.0510
20.000			.5580	.1450	.1390	-.0020			.0840		.0280				
40.000			.6620	.2060	.1920	.0940			.0710		.0270	-.0200	-.0320	-.0200	.1650
55.000			.6870	.2060	.1550	.2640			.2210		.1320				
70.000			.6550	.2060	.0970	.2860			.2530		.1810	.0420	-.0240	-.0450	-.0310
90.000		1.0540	.5930	.1720	.0840	.2360			.2750		.2490	.0460	-.0460	-.0550	-.0550
120.000			.5130	.1560	.0820	.1550			.3800		.1640	.0040	-.0530	-.0860	-.0790
142.000										.0810					
150.000			.4340	.1140	.0670	.1380			.6140		-.0210	-.0350	-.0480	-.0610	-.0820
157.000								.6870							
162.000									.6170						
165.000											-.0820	-.0190	-.0180	-.0480	-.0820
169.000									.5340						
172.000							.6220								
180.000	1.2840	.8250	.2930	.0910	.0380	.1070			.6990		-.1260	-.1250	-.1020	-.1490	-.1280

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0370							-.0980		-.0770
40.000	.0850	.0670		.1910	.1460	.1660	.0690			-.1280
70.000		-.0480	-.0660	-.0600	-.0720	-.0150	-.0310	-.0420		
90.000		-.0430	-.0520	-.0440	.0430	.0690	.0050	-.0150		
105.000				.0660	.1030	.0840	.0620	-.0360		
110.000									-.0110	
120.000		-.0770	-.0810	.3600	.2550	.0350	-.0080	-.0220	-.0270	
135.000				.0970	.1330	-.0560	-.1170	-.0920		
150.000		-.0870	-.0870	-.0310	-.0240	-.1190	-.1150	-.1050		
165.000		-.0820		-.0690	.0390	.0080	.0710	-.0110		
180.000		-.1140	-.1030	-.0760						

MACH (1) = 2.498 BETAT (3) = -4.160

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3630	.9450	.5120	.1130	.0570	-.0270			.1950		.1160	.0240	.0240	-.0480	-.1660
20.000			.5440	.1400	.1250	-.0150			.1450		.0570				
40.000			.6150	.1760	.1960	.0900			.0890		.0320	-.0020	-.0170	-.0400	.0390
55.000			.6250	.1770	.1590	.2340			.1830		.1190				
70.000			.6000	.1750	.0960	.2520			.2110		.1530	.0240	-.0440	-.0640	-.0580
90.000		1.0450	.5370	.1240	.0790	.1470			.2490		.2130	.0130	-.0540	-.0680	-.0790
120.000			.4570	.1200	.0920	.1440			.2660		.1400	-.0180	-.0630	-.0870	-.0960

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB15)

MACH (1) = 2.498 BETAT (3) = -4.16

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0320					
150.000			.3970	.0970	.0910	.1550			.5650		-.0530	-.0530	-.0660	-.0690	-.0920
157.000								.6690							
162.000									.5760						
165.000											-.1010	-.0700	-.0360	-.0580	-.0890
169.000									.5300						
172.000							.6210								
180.000	1.3630	.8300	.2870	.0890	.0790	.1290			.7120		-.1330	-.1270	-.1660	-.1300	-.1110

X/LB	.5873	.6526	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0690							-.0820		-.0660
40.000	.0480	.0340		.1490	.0960	.0720	-.0230			-.1320
70.000		-.0720	-.0820	-.0770	-.0810	-.0260	-.0230	-.0660		
90.000		-.0620	-.0700	-.0640	.0210	-.0650	-.0110	-.0370		
105.000				.0440	.0700	.0490	-.0130	-.0470		
110.000									.0180	
120.000		-.0880	-.0840	.2830	.2210	.0120	-.0210	-.0360	-.0410	
135.000				.1310	.1550	-.0730	-.0970	-.0780		
150.000		-.0810	-.0750	.0610	.0170	-.0960	-.0770	-.0640		
165.000		-.0770		.0490	.0580	.0370	.0500	-.0260		
180.000		-.0820	-.0810	-.0570						

MACH (1) = 2.498 BETAT (4) = .06

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3710	.9550	.4800	.1740	.0420	-.0210			.2210		.1640	.0920	.0590	-.0390	-.0980
20.000			.4830	.1180	.0660	-.0230			.2040		.1500				
40.000			.5210	.1060	.1510	.0090			.1740		.0600	.0240	.0140	-.0490	-.0690
55.000			.5170	.1530	.0890	.0500			.1410		.0970				
70.000			.4790	.1050	.0230	.0650			.1230		.1310	.0040	-.0600	-.0740	-.0840
90.000		.9430	.4270	.0490	.0200	.0740			.0980		.1550	-.0010	-.0550	-.0810	-.0920
120.000			.3740	.0700	.0460	.0770			.1560		.0540	-.0460	-.0690	-.0860	-.0950
142.000										-.0310					
150.000			.3560	.0720	.0770	.1180			.4770		-.0790	-.1060	-.0900	-.0700	-.0630
157.000								.6350							
162.000									.5220						
165.000											-.1210	-.1220	-.0940	-.0570	-.0520
169.000									.5320						
172.000							.7050								

AMES 87-707 IA9 ORA + S3 + T9 ORBITER FUSELAGE (PSB815)

MACH (1) = 2.498 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3710	.8520	.3010	.0920	.0950	.1430			.7190		-.1360	-.1200	-.1110	-.0520	-.0430

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0480							-.0730		-.0520
4.000	.0190	.0330		.0590	.0220	.0070	-.0760			-.0580
7.000		-.0960	-.0990	-.0810	-.0550	-.0620	-.0790	-.0800		
9.000		-.0780	-.0730	-.0160	-.0150	-.0370	-.0600	-.0650		
105.000				.0120	.0140	-.0160	-.0520	-.0670		
110.000									-.0280	
120.000		-.0760	-.0520	.0750	.0990	-.0200	-.0480	-.0500	-.0510	
135.000				.1300	.1650	-.0190	-.0530	-.0110		
150.000		-.0670	-.0610	.0650	.1210	-.0240	-.0450	.0690		
165.000		-.0630		.0410	.1410	.0200	.0440	-.0320		
180.000		-.0590	-.0610	-.0540						

MACH (1) = 2.498 BETAT (5) = 4.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3320	.9460	.4790	.1210	.0510	.0710			.1780		.0980	.0540	.0270	-.0420	-.0780
2.000			.4760	.1050	.0320	.0440			.2050		.1040				
4.000			.4600	.0740	.0720	-.0010			.1260		.0550	-.0190	-.0190	-.0820	-.0480
55.000			.4250	.0790	.0410	-.0120			.0140		.0720				
7.000			.3710	.0460	-.0140	.0010			.0110		.0140	-.0110	-.0650	-.0850	-.1140
9.000		.8330	.3240	-.0120	-.0190	.0250			.0250		.0470	-.0130	-.0630	-.0900	-.1080
120.000			.2840	.0180	-.0420	.0330			.0360		-.0150	-.1070	-.0870	-.0890	-.0800
142.000										-.0730					
150.000			.2960	.0440	.0450	.0960			.0770		-.1030	-.1380	-.1220	-.0680	-.0470
157.000								.5830							
162.000									.4900						
165.000											-.1420	-.1460	-.1180	-.0710	-.0480
169.000									.5270						
172.000							.6290								
180.000	1.3520	.8380	.2910	.0880	.0890	.1340			.6990		-.1340	-.1270	-.0970	-.1320	-.1090

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0840							-.0780		-.0590
[illegible] 000	-.0120	.0780		-.1280	-.0180	-.0510	-.1170			-.0740

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-7U7 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNB15)

MACH (1) = 2.498 BETAT (5) = 4.31U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.8373	.8526	.738[illegible]	.7869	.8283	.8848	.9262	.9839	1.0015	1.0392
PHI										
7[illegible]		-.09[illegible]	-.09[illegible]	-.09[illegible]	-.07[illegible]	-.07[illegible]	-.09[illegible]	-.09[illegible]		
9[illegible]		-.07[illegible]	-.08[illegible]	-.05[illegible]	-.05[illegible]	-.05[illegible]	-.07[illegible]	-.06[illegible]		
105.[illegible]				-.02[illegible]	-.04[illegible]	-.05[illegible]	-.07[illegible]	-.08[illegible]		
11[illegible]									-.01[illegible]	
12[illegible]		-.07[illegible]	-.15[illegible]	.00[illegible]	.02[illegible]	-.05[illegible]	-.07[illegible]	-.06[illegible]	-.05[illegible]	
135.[illegible]				.27[illegible]	.24[illegible]	-.05[illegible]	-.04[illegible]	-.04[illegible]		
15[illegible]		-.06[illegible]	-.07[illegible]	.07[illegible]	.21[illegible]	.01[illegible]	-.05[illegible]	-.02[illegible]		
165.[illegible]		-.05[illegible]		-.04[illegible]	.15[illegible]	.06[illegible]	.01[illegible]	-.02[illegible]		
18[illegible]		-.04[illegible]	-.08[illegible]	-.05[illegible]						

MACH (1) = 2.49[illegible] BETAT (5) = 6.44[illegible]

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.1446	.1675	.1888	.2339	.2682	.3355	.3946	.4591	.4732	.4958	.5259	.5711	.6214	.6953	.7125
PHI															
.144[illegible]	1.322[illegible]	.934[illegible]	.907[illegible]	.213[illegible]	.055[illegible]	.128[illegible]			.111[illegible]		.054[illegible]	.032[illegible]	.011[illegible]	-.044[illegible]	-.053[illegible]
2[illegible]			.473[illegible]	.195[illegible]	.022[illegible]	.144[illegible]			.107[illegible]		.048[illegible]				
4[illegible]			.428[illegible]	.072[illegible]	.033[illegible]	-.041[illegible]			.134[illegible]		.048[illegible]	-.038[illegible]	-.058[illegible]	-.112[illegible]	-.076[illegible]
55.[illegible]			.376[illegible]	.076[illegible]	.017[illegible]	-.029[illegible]			-.113[illegible]		.049[illegible]				
7[illegible]			.307[illegible]	.026[illegible]	-.036[illegible]	-.018[illegible]			.069[illegible]		.074[illegible]	-.023[illegible]	-.069[illegible]	-.098[illegible]	-.114[illegible]
9[illegible]		.758[illegible]	.253[illegible]	-.042[illegible]	-.044[illegible]	-.004[illegible]			.012[illegible]		.023[illegible]	-.046[illegible]	-.077[illegible]	-.097[illegible]	-.107[illegible]
12[illegible]			.244[illegible]	-.046[illegible]	-.125[illegible]	.043[illegible]			.030[illegible]		-.041[illegible]	-.124[illegible]	-.116[illegible]	-.091[illegible]	-.077[illegible]
142.[illegible]										-.095[illegible]					
15[illegible]			.265[illegible]	.029[illegible]	.032[illegible]	.054[illegible]			.314[illegible]		-.121[illegible]	-.148[illegible]	-.132[illegible]	-.076[illegible]	-.059[illegible]
157.[illegible]								.457[illegible]							
162.[illegible]									.479[illegible]						
165.[illegible]											-.155[illegible]	-.148[illegible]	-.127[illegible]	-.108[illegible]	-.073[illegible]
169.[illegible]									.519[illegible]						
172.[illegible]							.532[illegible]								
18[illegible]	1.322[illegible]	.829[illegible]	.285[illegible]	.081[illegible]	.087[illegible]	.137[illegible]			.684[illegible]		-.125[illegible]	-.129[illegible]	-.116[illegible]	-.156[illegible]	-.131[illegible]

X/LB	.8373	.8626	.7380	.7869	.8283	.8848	.9262	.9839	1.0015	1.0392
PHI										
.144[illegible]	-.037[illegible]							-.096[illegible]		-.076[illegible]
4[illegible]	-.018[illegible]	.028[illegible]		-.047[illegible]	-.049[illegible]	-.066[illegible]	-.085[illegible]			-.083[illegible]
7[illegible]		-.102[illegible]	-.103[illegible]	-.096[illegible]	-.074[illegible]	-.077[illegible]	-.093[illegible]	-.121[illegible]		
9[illegible]		-.074[illegible]	-.088[illegible]	-.056[illegible]	-.061[illegible]	-.064[illegible]	-.082[illegible]	-.090[illegible]		
105.[illegible]				-.013[illegible]	-.052[illegible]	-.064[illegible]	-.078[illegible]	-.092[illegible]		
11[illegible]									-.019[illegible]	
12[illegible]		-.089[illegible]	-.074[illegible]	.064[illegible]	.015[illegible]	-.092[illegible]	-.091[illegible]	-.083[illegible]	-.076[illegible]	
135.[illegible]				.357[illegible]	.255[illegible]	-.094[illegible]	-.078[illegible]	-.069[illegible]		
15[illegible]		-.079[illegible]	-.083[illegible]	.043[illegible]	.144[illegible]	-.091[illegible]	-.071[illegible]	-.042[illegible]		

AMES 87-707 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RBNB15)

MACH (1) = 2.498 BETAT (6) = 5.44

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.1060		-.0390	.1140	.0010	-.0200	-.0450		
180.000		-.1110	-.1560	-.0760						

MACH (1) = 2.498 BETAT (7) = 8.57

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2340	.8900	.4230	.0440	.0740	.1390			.0410		.0260	-.0200	-.0360	-.0370	-.0370
20.000			.3780	.0290	.0450	.1340			.0710		.0170				
40.000			.3450	.0020	.0240	-.0190			.0530		-.0640	-.0860	-.1020	-.1200	-.1070
55.000			.3210	.0010	-.0380	-.0450			-.0480		-.0050				
70.000			.2530	-.0270	-.0660	-.0270			-.0040		.0370	-.0380	-.0880	-.1080	-.1190
90.000		.6850	.2140	-.0690	-.0690	-.0310			-.0050		.0030	-.0670	-.0870	-.1040	-.1040
120.000			.2540	-.0330	-.0470	-.0500			-.0050		-.0870	-.1440	-.1220	-.0890	-.0770
142.000										-.1150					
150.000			.2360	.0110	.0140	.0530			.0530		-.1410	-.1690	-.1460	-.0920	-.0910
157.000								.4210							
162.000									.0630						
165.000											-.1750	-.1680	-.1380	-.1530	-.1290
169.000									.5010						
172.000							.4570								
180.000	1.2340	.8260	.2770	.0750	.0780	.1450			.0620		-.1340	-.1290	-.1690	-.1790	-.1610

X/LB	.5073	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1020							-.1080		-.0920
40.000	-.1080	-.1060		-.1620	-.1040	-.1530	-.1550			-.0920
70.000		-.0920	-.1560	-.1560	-.1060	-.0990	-.1020			
90.000		-.0770	-.0910	-.0690	-.0660	-.0690	-.0870	-.0950		
105.000				-.0200	-.0540	-.0720	-.0930	-.1000		
115.000									-.1000	
120.000		-.0980	-.0640	.0610	.0130	-.1570	-.1150	-.0980	-.0880	
135.000				.3570	.2480	-.1160	-.0770	-.0650		
150.000		-.1140	-.1220	-.0480	-.0740	-.1080	-.1070	-.0940		
165.000		-.1250		-.0710	.0030	-.0610	-.0660	-.0880		
180.000		-.1290	-.1210	-.0950						

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AMES 67-PCT IAB CEA + 53 + 79 ORBITER FUSELAGE (BB1B15)

MACH (2) = 2.959 BETA (1) = -8.95

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0338	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5122
PHI															
.00	1.1725	.7435	.3172	.1340	.0959	.0559			.1159		.0177	.0269	-.0111	-.0265	-.0269
2.00			.4487	.1791	.0819	.0259			.1069		.0377				
4.00			.4792	.1611	.1133	.0258			.1833		.0333	.0332	-.0211	-.0177	.0402
6.00			.5137	.2209	.1739	.0449			.3122		.0214				
10.00			.5444	.2268	.1599	.0242			.3288		.0256	.1169	.0429	.0139	.0240
14.00			.5444	.2268	.1599	.0242			.2242		.0324	.1119	.0269	-.0039	-.0139
18.00		1.0000	.5444	.2139	.1546	.0199			.3183		.0191	.0540	.0068	-.0331	-.0540
22.00			.5111	.1937	.1357	.0240				.1118					
142.00									.6199		-.0122	-.0133	-.0133	-.0199	-.0369
150.00			.4459	.1439	.1259	.0859		.6720							
157.00									.6379						
162.00											-.0269	-.0139	.0119	.0248	-.0359
165.00									.6511						
169.00							.3959								
172.00									.6299		-.0177	-.0567	-.0569	-.0193	-.0219
180.00	1.2229	.9189	.2979	.0111	.0689	.0159									

X/LB .5073 .5625 .7239 .7969 .8293 .8542 .9262 .9639 1.0215 1.0392

PHI										
.00	-.0331							-.1219		-.1822
4.00	-.0339	.0040		.2299	.1669	.1119	.0219			-.1589
7.00		-.0249	-.0499	-.0389	-.0339	-.0219	-.0249	.0999		
9.00		-.0199	-.0349	-.0349	.0569	.0259	.0377	.0359		
115.00				.1459	.1549	.2149	.1269	.1259		
11.00									.1429	
12.00		-.0549	-.0559	.3329	.2499	.1689	.0139	.0399	.1199	
135.00				.1219	.1599	-.0819	-.1569	-.1529		
15.00		-.0529	-.0529	-.1259	-.1149	-.1399	-.1159	-.0599		
165.00		-.0529		-.0179	.0229	-.0619	.0149	-.0219		
18.00		-.1189	-.0699	-.0759						

MACH (2) = 2.959 BETA (2) = -6.49

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0338	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5122
PHI															
.00	1.2568	.8495	.4589	.1539	.0249	-.0119			.1229		.0399	.0339	.0419	-.0049	-.0299
2.00			.4789	.1769	.0339	.0349			.1299		.0449				
4.00			.5739	.1579	.1149	.2749			.1549		.0679	.0359	-.0169	-.0289	.0199
55.00			.5959	.1929	.1439	.3499			.2589		.1829				
7.00			.6179	.1859	.1259	.1639			.3139		.2229	.0949	.0229	-.0349	-.0179
9.00		1.0549	.5939	.1789	.1169	.1649			.1959		.2699	.0949	.0149	-.0139	-.0319
12.00			.5159	.1729	.1339	.1719			.2359		.1339	.0329	.0009	-.0419	-.0699

AMES 87-7,7 IA9 02A + 33 + T9 ORBITER FUSELAGE (RUN815)

MACH (2) = 2.999 BETAT (2) = -6.0,

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5125
PHI															
142.000										.0889					
150.000			.4325	.1330	.1195	.1665			.5685		-.0140	-.0315	-.0270	-.0290	-.0430
157.000								.6625							
162.000									.6059						
165.000											-.0390	-.0370	-.0210	-.0090	-.0410
169.000									.5465						
172.000							.8885								
180.000	1.2568	.8295	.3410	.1150	.0930	.1190			.7010		-.0780	-.0670	-.0320	-.0190	-.0120

X/LB	.5873	.6626	.7387	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0410							-.0760		-.0710
40.000	.0480	.0890		.1680	.1310	.0990	.0330			-.0650
70.000		-.1430	-.1840	-.1580	-.1480	-.0220	-.0190	-.0250		
90.000		-.1080	-.0530	-.0590	.0240	.0130	.0190	.0090		
115.000				.0190	.0450	.0750	.0370	.0070		
110.000									.0560	
120.000		-.0810	-.0640	.2320	.1920	.0730	.0240	.0090	-.0040	
135.000				.1040	.1380	-.0240	-.0670	-.0690		
150.000		-.1630	-.1680	-.0390	-.0210	-.0490	-.0790	-.0620		
165.000		-.1810		-.0180	.0140	-.0090	.0420	-.0190		
180.000		-.0990	-.0860	-.0670						

MACH (2) = 2.999 BETAT (3) = -4.24,

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5125
PHI															
.000	1.2830	.8830	.4150	.1450	.1460	-.0290			.1520		.0190	.0480	.0080	.0030	-.0420
20.000			.4690	.1620	.1480	-.0300			.1840		.0650				
40.000			.5610	.1270	.0750	.0690			.1490		.0590	.0230	-.0190	-.0250	-.0010
55.000			.5740	.1640	.0140	.0330			.2290		.0540				
70.000			.5580	.1590	.0590	.0210			.1320		.0190	.0640	-.0030	-.0220	-.0380
90.000		1.0110	.5380	.1480	.0840	.0210			.1290		.0120	.0570	-.0060	-.0270	-.0480
120.000			.4770	.1430	.1070	.1340			.1840		.0710	-.0060	-.0140	-.0480	-.0650
142.000										.0510					
150.000			.4120	.1220	.0180	.1460			.5290		-.0360	-.0560	-.0510	-.0450	-.0570
157.000								.8430							
162.000									.5780						
165.000											-.0620	-.0690	-.0520	-.0290	-.0490
199.000									.5440						
172.000							.8150								

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AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB13)

MACH (2) = 2.999 BETAT (3) = -4.24

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.2830	.8450	.3070	.1580	.0920	.1170			.7200		-.0910	-.1000	-.0840	-.0860	-.0990
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9252	.9539	1.0015	1.0392					
PHI															
.000	-.0670							-.0950		-.0650					
40.000	.0350	.0340		.1340	.0970	.0340	-.0110			-.0970					
70.000		-.0670	-.0810	-.0760	-.0660	-.0410	-.0520	-.0440							
90.000		-.0530	-.0740	-.0660	-.0120	-.0170	-.0250	-.0130							
105.000				-.0670	.0110	.0300	-.0110	-.0170							
110.000									.0280						
120.000		-.0750	-.0770	.1520	.1350	.0040	-.0170	-.0120	-.0190						
135.000				.0830	.1180	-.0750	-.0940	-.0580							
150.000		-.0730	-.0730	-.0220	-.0080	-.1050	-.0970	-.0720							
165.000		-.0690		-.0180	.0130	-.0150	.0000	-.0310							
180.000		-.0790	-.0780	-.0670											

MACH (2) = 2.999 BETAT (4) = .60

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3080	.9480	.4380	.0560	.0570	-.0360			.0530		.1530	.1110	.1100	.0260	-.0420
20.000			.4600	.0670	.0530	-.0390			.0640		.1350				
40.000			.5180	.0950	.0580	-.0290			.0320		.0930	.0270	.0220	-.0030	-.0380
55.000			.5190	.1010	.0530	.0400			.0370		.1240				
75.000			.4690	.1030	.0360	.0520			.0570		.1010	.0380	-.0210	-.0450	-.0610
90.000		.9030	.4250	.0740	.0290	.0550			.0410		.0610	.0140	-.0190	-.0470	-.0680
120.000			.3860	.0900	.0530	.0710			.1010		.0210	-.0590	-.0610	-.0520	-.0750
142.000										-.0020					
150.000			.3640	.0930	.0800	.1180			.0360		-.0530	-.0770	-.0820	-.0660	-.0520
157.000								.0230							
162.000									.0250		-.0780	-.0890	-.0840	-.0690	-.0440
165.000									.0430						
169.000							.0730								
172.000									.0380		-.0930	-.0880	-.0830	-.0690	-.0410
180.000	1.3080	.8680	.3140	.1070	.0960	.1250									
X/LB	.9873	.6626	.7380	.7869	.8263	.8848	.9252	.9639	1.0015	1.0392					
PHI															
.000	-.0750							-.1060		-.0550					
40.000	-.0560	.0050		.0430	.0120	-.0060	-.0710			-.1090					

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB15)

MACH (2) = 2.999 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0890	-.0980	-.0950	-.0690	-.0770	-.0870	-.0680		
90.000		-.0820	-.0880	-.0590	-.0470	-.0590	-.0660	-.0510		
105.000				-.0380	-.0350	-.0420	-.0560	-.0480		
110.000									.0240	
120.000		-.0750	-.0710	.0140	.0340	-.0440	-.0510	-.0320	-.0350	
135.000				.0970	.1190	-.0440	-.0770	-.0220		
150.000		-.0530	-.0570	.0280	.1120	-.0610	-.0470	-.0170		
165.000		-.0480		-.0160	.0870	.0410	.0120	-.0220		
180.000		-.0440	-.0490	-.0470						

MACH (2) = 2.999 BETAT (5) = 4.390

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.2780	.9130	.4250	.3480	.3410	-.0300			.1450		.0880	.0540	.0590	-.0010	-.0410
20.000			.4120	.3430	.3370	-.0310			.1140		.1170				
40.000			.4300	.3510	.3240	-.0260			.1260		.0670	.0220	.0060	-.0450	-.0760
55.000			.4160	.3450	.3040	-.0250			-.0030		.0290				
70.000			.3660	.3440	-.0170	.0060			.0490		.0110	-.0130	-.0310	-.0540	-.0710
90.000		.7780	.3150	.0210	-.0150	.0110			-.0140		.0110	-.0580	-.0460	-.0540	-.0750
120.000			.2940	.0390	.0210	.0260			.0240		-.0230	-.0840	-.0880	-.0710	-.0600
142.000										-.0360					
150.000			.3040	.0650	.0520	.0820			.0340		-.0710	-.1000	-.0980	-.0820	-.0420
157.000								.5000							
162.000									.0110						
165.000											-.1030	-.1050	-.0930	-.0810	-.0570
180.000									.0410						
172.000							.5720								
180.000	1.2780	.8530	.3040	.1140	.0920	.1130			.0710		-.0940	-.0960	-.0870	-.0880	-.1020

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0840							-.1010		-.0640
40.000	-.0820	-.0220		-.0420	-.0210	-.0590	-.1100			-.0590
70.000		-.0940	-.0950	-.0880	-.0740	-.0870	-.0970	-.0770		
90.000		-.0840	-.0830	-.0700	-.0660	-.0670	-.0800	-.0650		
105.000				-.0430	-.0600	-.0700	-.0770	-.0660		
110.000									-.0200	
120.000		-.0680	-.0670	.0430	-.0070	-.0690	-.0830	-.0540	-.0490	
135.000				.1360	.1520	-.0720	-.0760	-.0520		
150.000		-.0590	-.0580	.0440	.1700	-.0210	-.0640	-.0480		

AMES 97-7J7 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB15)

MACH (2) = 2.999 BETAT (5) = 4.39J

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.738J	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392
PHI										
185.000		-.049J		-.029J	.093J	.025J	-.028J	-.008J		
180.000		-.083J	-.078J	-.069J						

MACH (2) = 2.999 BETAT (6) = 6.57J

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.252J	.879J	.399J	.038J	.027J	-.014J			.121J		.033J	.021J	.021J	-.013J	-.028J
2J.000			.382J	.028J	.021J	-.036J			.111J		.07JJ				
4J.000			.384J	.029J	.004J	-.033J			.013J		.034J	-.018J	-.028J	-.058J	-.087J
55.000			.365J	.018J	-.018J	-.031J			-.015J		.047J				
7J.000			.313J	.018J	-.037J	-.013J			-.012J		.011J	-.031J	-.036J	-.059J	-.077J
9J.000		.715J	.269J	-.005J	-.036J	-.011J			-.038J		-.011J	-.064J	-.069J	-.058J	-.076J
12J.000			.255J	.019J	-.006J	.006J			-.014J		-.04JJ	-.095J	-.097J	-.081J	-.052J
142.000										-.051J					
15J.000			.278J	.049J	.041J	.053J			.283J		-.078J	-.107J	-.105J	-.088J	-.048J
157.000								.484J							
162.000									.497J						
165.000											-.107J	-.108J	-.098J	-.092J	-.089J
169.000									.522J						
172.000							.515J								
18J.000	1.252J	.837J	.299J	.008J	.009J	.009J			.69JJ		-.084J	-.093J	-.099J	-.11JJ	-.12JJ

X/LB	.5873	.6626	.738J	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.042J							-.085J		-.054J
4J.000	-.074J	-.021J		-.01JJ	-.049J	-.047J	-.09JJ			-.056J
7J.000		-.09JJ	-.09JJ	-.089J	-.077J	-.077J	-.087J	-.077J		
9J.000		-.079J	-.082J	-.07JJ	-.065J	-.068J	-.078J	-.07JJ		
155.000				-.037J	-.054J	-.07JJ	-.08JJ	-.07JJ		
11J.000									-.01GJ	
12J.000		-.062J	-.073J	.008J	-.054J	-.075J	-.087J	-.066J	-.058J	
135.000				.24JJ	.2GJJ	-.07JJ	-.07GJ	-.066J		
15J.000		-.066J	-.07JJ	.019J	.009J	-.07JJ	-.08JJ	-.056J		
165.000		-.07JJ		-.05JJ	.052J	-.043J	-.043J	-.01GJ		
18J.000		-.1JJJ	-.089J	-.07JJ						

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB15)

MACH (2) = 2.999 BETAT (7) = 8.730

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2190	.8240	.3780	.0240	.0000	.0580			.0970		.0130	.0260	-.0060	-.0320	-.0360
20.000			.3390	.0130	.0010	-.0120			.0660		.0020				
40.000			.3280	.0060	-.0220	-.0370			.0550		-.0220	-.0560	-.0670	-.0900	-.0990
55.000			.3020	-.0060	-.0380	-.0420			-.0220		-.0150				
70.000			.2540	-.0280	-.0540	-.0280			-.0180		.0070	-.0370	-.0520	-.0680	-.0830
90.000		.6410	.2180	-.0310	-.0520	-.0280			-.0350		-.0230	-.0660	-.0730	-.0630	-.0790
120.000			.2190	-.0030	-.0210	-.0240			-.0110		-.0620	-.1070	-.1090	-.0880	-.0530
142.000										-.0650					
150.000			.2470	.0360	.0310	.0210			.2470		-.0870	-.1170	-.1120	-.0910	-.0840
157.000								.4380							
162.000									.4810						
165.000											-.1190	-.1160	-.1020	-.1080	-.1220
169.000									.5070						
172.000							.4680								
180.000	1.2190	.8150	.2880	.0910	.0830	.1020			.6670		-.0830	-.0910	-.1090	-.1170	-.1310

X/LE	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0320							-.1310		-.0810
40.000	-.0910	-.0480		-.0360	-.0820	-.1150	-.1240			-.0740
70.000		-.0860	-.0910	-.0890	-.0810	-.1150	-.1240	-.0620		
90.000		-.0780	-.0810	-.0760	-.0630	-.1050	-.1190	-.0840		
105.000				-.0380	-.0570	-.1090	-.1230	-.0820		
115.000									-.0320	
125.000		-.0790	-.0780	.0070	-.0460	-.1080	-.1310	-.0840	-.0790	
135.000				.2330	.1850	-.0940	-.1150	-.0620		
150.000		-.1120	-.1060	-.0640	-.0760	-.1520	-.1360	-.0730		
165.000		-.1130		-.0810	-.0480	-.1170	-.1540	-.0720		
180.000		-.1120	-.1020	-.0810						

MACH (3) = 3.502 BETAT (1) = -8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2360	.7480	.3650	.0330	-.0040	.0250			.1610		.0470	.0190	.0220	-.0040	-.0440
20.000			.4210	.0660	.0110	.0530			.0940		.0590				
40.000			.3450	.0650	.0890	.1310			.2490		.1190	.0660	-.0080	-.0320	.0170
55.000			.6150	.1960	.1520	.1840			.3420		.2380				
70.000			.6520	.1810	.1480	.1760			.1770		.2750	.1310	.0510	.0260	.0070
90.000		1.1140	.6470	.2170	.1430	.1740			.1920		.2700	.1240	.0510	.0120	-.0040
120.000			.5520	.2160	.1540	.1840			.2340		.1220	.0320	.0210	-.0180	-.0410

AMES 87-707 IA9 C8A + S3 + T9 ORBITER FUSELAGE (RBNS15)

MACH (3) = 3.502 BETAT (1) = -8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1130					
150.000			.4430	.1470	.1250	.1670			.5860		.0050	-.0230	-.0200	-.0180	-.0300
157.000								.6650							
162.000									.6330						
165.000											-.0170	-.0180	-.0200	.0040	-.0230
169.000									.5690						
172.000							.6260								
180.000	1.2380	.8230	.2950	.1170	.0880	.1000			.6810		-.0610	-.0680	-.0830	-.0790	-.1000

X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0320							-.0760		-.0790
4.000	.0280	.0660		.1850	.1420	.0860	.0490			-.0530
7.000		-.0280	-.0500	-.0430	-.0370	.0170	.0080	.0020		
9.000		-.0250	-.0370	-.0380	.0190	.0390	.0260	.0340		
109.000				.0290	.0490	.0780	.0610	.0370		
110.000									.0530	
120.000		-.0520	-.0560	.2440	.2040	.0770	.0600	.0460	.0310	
135.000				.1060	.1430	-.0390	-.0530	-.0480		
150.000		-.0470	-.0530	-.0220	-.0090	-.0830	-.0710	-.0520		
165.000		-.0470		-.0220	.0030	-.0340	.0280	-.0140		
180.000		-.0990	-.0890	-.0780						

MACH (3) = 3.502 BETAT (2) = -6.520

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2810	.8610	.4130	.1450	.0140	-.0310			.0860		.0520	.0180	-.0010	.0080	-.0320
2.000			.4660	.0730	.0130	.0130			.1390		.0640				
4.000			.5660	.0730	.0760	.0870			.2150		.0950	.0620	.0060	-.0330	-.0080
55.000			.5860	.1050	.1270	.1220			.3180		.1960				
7.000			.5990	.1550	.1160	.1310			.1460		.2470	.1090	.0350	.0080	-.0140
9.000		1.0680	.5930	.1780	.1090	.1280			.1410		.2080	.1060	.0320	-.0020	-.0260
120.000			.5160	.1810	.1260	.1420			.1690		.0890	.0050	.0080	-.0240	-.0500
142.110										.0840					
150.000			.4310	.1380	.1120	.1510			.5410		-.0040	-.0280	-.0350	-.0310	-.0460
157.000								.6450							
162.000									.6000						
165.000											-.0230	-.0320	-.0370	-.0200	-.0250
169.000									.5610						
172.000							.6290								

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB15)

MACH (3) = 3.502 BETAT (2) = -6.520

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.2810	.8470	.3080	.1370	.0870	.1010			.7040		-.0560	-.0650	-.0730	-.0840	-.0950
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0380							-.0690		-.0760					
40.000	.0430	.0290		.1590	.1190	.0720	.0350			-.0640					
70.000		-.0450	-.0660	-.0560	-.0590	-.0830	.0110	-.0210							
90.000		-.0440	-.0550	-.0510	-.0690	.0160	.0130	.0110							
108.000				-.0110	.0150	.0640	.0390	.0140							
110.000									.0300						
125.000		-.0580	-.0630	.1710	.1510	.0300	.0410	.0150	.0100						
135.000				.0870	.1210	-.0210	-.0550	-.0520							
150.000		-.0540	-.0630	-.0320	-.0150	-.0720	-.0660	-.0520							
165.000		-.0560		-.0290	-.0430	-.0230	.0220	-.0230							
180.000		-.0930	-.0850	-.0680											

MACH (3) = 3.502 BETAT (3) = -4.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3020	.9250	.4380	.0680	.0460	-.0340			.0550		.0910	.0310	.0610	.0250	-.0220
20.000			.4810	.0850	.0410	-.0360			.0180		.0810				
40.000			.5770	.0840	.0780	.0530			.0680		.0910	.0340	-.0480	-.0210	-.0250
55.000			.5810	.1100	.1030	.0880			.1130		.1670				
70.000			.5800	.1390	.0910	.0920			.1060		.1250	.0790	.0120	-.0690	-.0310
90.000		1.0200	.5450	.1550	.0830	.0930			.0980		.1130	.0530	.0070	-.0160	-.0380
125.000			.4860	.1540	.1050	.1210			.1240		.0480	-.0340	-.0250	-.0340	-.0540
142.000										.0580					
150.000			.4210	.1540	.1050	.1330			.0990		-.0280	-.0520	-.0500	-.0450	-.0520
157.000								.6300							
162.000									.5700						
165.000											-.0460	-.0610	-.0500	-.0440	-.0360
169.000									.5530						
172.000							.6360								
180.000	1.3040	.0660	.3210	.1530	.0930	.1100			.7210		-.0730	-.0830	-.0690	-.0750	-.0790
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0510							-.0640		-.0600					
.000	-.0030	.0200		.1250	.0770	.0390	.0170			-.0740					

AMES 67-7U7 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB15)

MACH (3) = 3.5U2 BETAT (3) = -4.33U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.738U	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
7U.UUU		-.U5U	-.U77U	-.U65U	-.U54U	-.U24U	-.U22U	-.U35U		
9U.UUU		-.U58U	-.U69U	-.U59U	-.U29U	-.U07U	-.U48U	-.U15U		
1U5.UUU				-.U27U	-.U11U	-.U05U	.U11U	-.U11U		
11U.UUU									.U11U	
12U.UUU		-.U69U	-.U77U	.1U7U	.U99U	-.U01U	.U11U	-.U04U	-.U09U	
135.UUU				.U65U	.1U1U	-.U53U	-.U61U	-.U56U		
15U.UUU		-.U61U	-.U58U	-.U33U	-.U16U	-.U73U	-.U57U	-.U66U		
165.UUU		-.U61U		-.U35U	-.U06U	-.U05U	.U11U	-.U29U		
18U.UUU		-.U81U	-.U74U	-.U61U						

MACH (3) = 3.5U2 BETAT (4) = .U5U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.U475	.U188	.U339	.U6U2	.1355	.15U6	.1581	.1732	.1958	.2259	.2711	.32UU	.3953	.512U
PHI															
.UUU	1.3U6U	.985U	.486U	.U8UU	.U07U	-.U41U			-.U19U		.13UU	.117U	.U61U	.U39U	-.U2UU
2U.UUU			.5U1U	.U94U	.U1UU	-.U42U			-.U35U		.U93U				
4U.UUU			.551U	.U94U	.U5UU	-.U34U			-.U23U		.1U8U	.U25U	.UU9U	.U19U	-.U21U
55.UUU			.55UU	.U99U	.U68U	.U29U			.U24U		.U42U				
7U.UUU			.5U5U	.1UUU	.U45U	.U34U			.U4UU		.U34U	.U13U	-.U05U	-.U36U	-.U49U
9U.UUU		.914U	.439U	.U9UU	.U47U	.U44U			.U4UU		.U41U	-.U18U	-.U19U	-.U32U	-.U54U
12U.UUU			.3UUU	.1U1U	.U63U	.U69U			.U67U		.U21U	-.U45U	-.U59U	-.U49U	-.U63U
142.UUU										.U17U					
15U.UUU			.363U	.1U1U	.U82U	.1U3U			.4U5U		-.U34U	-.U58U	-.U7UU	-.U65U	-.U51U
157.UUU								.58UU							
162.UUU									.528U						
165.UUU											-.U55U	-.U67U	-.U71U	-.U67U	-.U51U
169.UUU									.549U						
172.UUU							.6U7U								
18U.UUU	1.3U5U	.775U	.314U	.1UUU	.U94U	.116U			.742U		-.U7UU	-.U69U	-.U69U	-.U63U	-.U55U

X/LB	.5873	.6626	.736U	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.UUU	-.U45U							-.U62U		-.U48U
4U.UUU	-.U46U	-.U32U		.U23U	-.U1UU	-.U21U	-.U38U			-.U88U
7U.UUU		-.U76U	-.U87U	-.U85U	-.U75U	-.U56U	-.U4UU	-.U62U		
9U.UUU		-.U73U	-.U84U	-.U69U	-.U56U	-.U44U	-.U48U	-.U52U		
1U5.UUU				-.U49U	-.U47U	-.U46U	-.U41U	-.U44U		
11U.UUU									-.U15U	
12U.UUU		-.U69U	-.U71U	.U18U	.U25U	-.U44U	-.U42U	-.U36U	-.U38U	
135.UUU				.U59U	.U84U	-.U45U	-.U56U	-.U43U		
15U.UUU		-.U53U	-.U56U	.U11U	.U54U	-.U4UU	-.U35U	-.U28U		

AMES 87-7(7 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RB:B15)

MACH (3) = 3.9(2 BETAT (4) = .0(

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.738(	.7869	.8283	.8848	.9262	.9639	1.0(15	1.0392
PHI										
165.((		-.(48(		-.(24(	.(41(	.(37(	.(15(	-.(22(		
18(.((		-.(43(	-.(48(	-.(43(						

MACH (3) = 3.9(2 BETAT (5) = 4.46(

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.(((	.(175	.(188	.(339	.(5(2	.1355	.1516	.1581	.1732	.1958	.2259	.2711	.32((	.3953	.512(
PHI															
.(((	1.294(	.924(	.435(	.(55(	.(36(	-.(31(			.(59(		.(85(	.(41(	.(67(	.(24(	-.(21(
2(.((			.432(	.(63(	.(16(	-.(3((			-.(17(		.119(				
4(.((			.454(	.(62(	.(21(	-.(3((			-.(17(		.(54(	.(18(	.(6((	-.(15(	-.(51(
55.((			.437(	.(61(	.(22(	-.(15(			-.(1((		-.(43(				
7(.((			.382(	.(63(	.(42(	-.((1(			.((((		-.(12(	-.(37(	-.(39(	-.(42(	-.(57(
9(.((		.793(	.326(	.(37(	.(13(	.(1((			-.((((		.(4((	-.(47(	-.(61(	-.(42(	-.(61(
12(.((			.317(	.(54(	.(21(	.(3((			-.((((		-.(15(	-.(65(	-.(73(	-.(72(	-.(53(
142.((										-.(14(					
15(.((			.312(	.(69(	.(59(	.(76(			.314(		-.(47(	-.(75(	-.(8((	-.(74(	-.(59(
157.((								.54((							
162.((									.518(						
165.((											-.(74(	-.(8((	-.(78(	-.(68(	-.(63(
169.((									.544(						
172.((							.548(								
18(.((	1.294(	.866(	.3(9(	.(69(	.(93(	.1(6(			.714(		-.(65(	-.(71(	-.(73(	-.(72(	-.(42(

X/LB	.5873	.6626	.738(	.7869	.8283	.8848	.9262	.9639	1.0(15	1.0392
PHI										
.(((	-.(49(							-.(79(		-.(58(
4(.((	-.(88(	-.(58(		-.(22(	-.(22(	-.(4((	-.(83(			-.(62(
7(.((		-.(79(	-.(88(	-.(81(	-.(72(	-.(77(	.(85(	-.(66(		
9(.((		-.(72(	-.(88(	-.(71(	-.(71(	-.(67(	-.(83(	-.(62(		
155.((				-.(53(	-.(62(	-.(67(	-.(81(	-.(66(		
11(.((									.(((	
12(.((		-.(54(	-.(6((	.(37(	-.(63(	-.(78(	-.(82(	-.(66(	-.(52(	
135.((				.(78(	.(95(	-.(79(	-.(82(	-.(65(		
15(.((		-.(47(	-.(52(	.(23(	.136(	-.(33(	-.(46(	-.(42(		
165.((		-.(.3(		-.(36(	.(55(	.(15(	-.(25(	-.(4((		
18(.((		-.(79(	-.(73(	-.(63(						

AMES 87-757 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB15)

MACH (3) = 3.502 BETAT (6) = 6.660

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2590	.8570	.4030	.0460	.0190	-.0260			.0910		.0460	.0130	-.0030	.0100	-.0330
20.000			.3870	.0430	.0010	-.0290			.0360		.0730				
40.000			.3910	.0420	.0020	-.0290			-.0240		.0370	-.0080	-.0250	-.0440	-.0710
55.000			.3700	.0410	.0000	-.0290			-.0200		-.0080				
70.000			.3140	.0420	-.0160	-.0150			-.0180		-.0250	-.0480	-.0470	-.0490	-.0610
90.000		.7140	.2680	.0110	-.0180	-.0060			-.0210		-.0220	-.0610	-.0640	-.0530	-.0640
120.000			.2620	.0320	.0060	.0070			-.0310		-.0310	-.0750	-.0800	-.0780	-.0590
142.000										-.0280					
150.000			.2820	.0610	.0460	.0640			.0690		-.0550	-.0830	-.0860	-.0790	-.0620
157.000								.5130							
162.000									.5030						
165.000											-.0820	-.0850	-.0780	-.0790	-.0820
169.000									.5260						
172.000							.5070								
180.000	1.2590	.8470	.3040	.0510	.0900	.0930			.0850		-.0600	-.0710	-.0800	-.0830	-.1020

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0870							-.1200		-.0680
40.000	-.0790	-.0560		-.0410	-.0390	-.0970	-.0960			-.0530
70.000		-.0810	-.0900	-.0840	-.0790	-.1120	-.0950	-.0640		
90.000		-.0740	-.0810	-.0740	-.0720	-.1040	-.1120	-.0680		
105.000				-.0540	-.0600	-.1030	-.1160	-.0720		
110.000									-.0270	
120.000		-.0540	-.0660	-.0610	-.0330	-.1220	-.1170	-.0770	-.0670	
135.000				.2090	.1660	-.0900	-.1040	-.0570		
150.000		-.0670	-.0720	-.0200	.0340	-.1140	-.1110	-.0450		
165.000		-.0830		-.0550	.0080	-.0960	-.0760	-.0330		
180.000		-.0970	-.0890	-.0710						

MACH (3) = 3.5?2 BETAT (7) = 8.880

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2190	.7420	.3520	.0230	.0000	.0150			.1430		.0350	.0060	.0180	-.0120	-.0470
20.000			.3190	.0150	-.0250	-.0070			.0680		.0060				
40.000			.3120	.0150	-.0320	-.0290			-.0490		-.0200	-.0540	-.0630	-.0800	-.0920
55.000			.2850	.0140	-.0330	-.0390			-.0320		-.0250				
70.000			.2320	.0120	-.0440	-.0360			-.0280		-.0370	-.0500	-.0570	-.0620	-.0690
90.000		.6300	.2020	-.0250	-.0460	-.0340			-.0450		-.0450	-.0720	-.0750	-.0660	-.0680
120.000			.2140	.0040	-.0220	-.0230			-.0610		-.0570	-.0900	-.0950	-.0870	-.0670

AMES 87-7:7 IA9 02A + 03 + T3 ORBITER FUSELAGE (FBNB15)

MACH (3) = 3.5:2 BETA? (7) = 0.00:

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0188	.0339	.0502	.1355	.1503	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
Z=I															
142.000										-.0460					
150.000			.2430	.0400	.0260	.0330			.2190		-.0670	-.0950	-.0950	-.0870	-.0830
157.000								.4530							
162.000									.4770						
165.000											-.0940	-.0950	-.0990	-.0980	-.1040
169.000									.5440						
172.000							.4650								
180.000	1.2130	.8220	.2870	.0990	.0750	.0820			.6570		-.0640	-.0760	-.0940	-.0950	-.1130

X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9252	.9539	1.0015	1.0392
Z=I										
.000	-.0340							-.1190		-.0860
40.000	-.0910	-.0580		-.0520	-.0490	-.0880	-.0910			-.0720
70.000		-.0840	-.0930	-.0840	-.0810	-.0950	-.0920	-.0730		
90.000		-.0750	-.0850	-.0810	-.0690	-.0870	-.0970	-.0770		
105.000				-.0530	-.0640	-.0950	-.1050	-.0990		
111.000									-.0360	
120.000		-.0640	-.0740	.0120	-.0650	-.0950	-.1140	-.0830	-.0710	
135.000				.1180	.0770	-.0940	-.0880	-.0590		
150.000		-.1000	-.1030	-.0820	-.0910	-.1140	-.1070	-.0910		
165.000		-.2210		-.0600	-.0750	-.0920	-.0890	-.0730		
180.000		-.1210	-.0990	-.0840						

AMES 97-0.7 IA9 OEA + 53 + 73 ORBITER FUSELAGE (BBNB16) (10 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 29.833 INCHES
LREF = 33.842 INCHES YMRP = .000 INCHES
BREF = 33.842 INCHES ZMRP = .000 INCHES
SCALE = .031 SCALE

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .000
RUDDER = -15.000 ELEVON = .000
RUDFLP = .000

MACH (1) = 2.498 BETAT (1) = -8.37

SECTION (1 ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/B	.0000	.0175	.0188	.0339	.0592	.1355	.1516	.1681	.1732	.1959	.2259	.2711	.3209	.3953	.5120
Z/B															
.0000	1.2750	.6970	.4390	.1590	.0390	.0590			.0260		.0240	-.0270	-.0370	-.0380	-.0300
.0200			.5130	.1990	.0170	-.0330			.0170		-.0170				
.0400			.5690	.1270	.0720	.0620			.0730		-.0010	-.0470	-.0400	-.0100	.0130
.0600			.7150	.2330	.2170	.2290			.2330		.0340				
.0800			.7150	.2350	.1690	.3440			.2650		.0620	.0020	-.0170	-.0240	-.0210
.0900		1.0130	.6290	.1930	.1550	.3340			.2650		.0730	.0400	-.0370	-.0560	-.0390
.1000			.4970	.1530	.0370	.2150			.2330		.0160	-.0230	-.0560	-.0650	-.0490
.1400										.1590					
.1900			.2340	.0940	.0470	.2190			.2550		-.0220	-.0630	-.0640	-.0650	-.0540
.2170								.5990							
.2650									.5230						
.2650											-.0490	-.0930	-.0160	-.0510	-.0520
.2690									.4710						
.2720							.4370								
.2900	1.2780	.7990	.2410	.0540	.0560	.1490			.5990		-.0360	-.1250	-.1640	-.1710	-.1530
X/B	.5573	.6625	.7390	.7669	.8203	.8648	.9252	.9539	1.0015	1.0392					
Z/B															
.0000	-.0190							-.0010		-.0650					
.0200	.0130	.1690		.2380	.1720	.1410	.0130			-.0270					
.0400		-.1210	-.0480	-.0490	-.0680	-.0120	-.0370	-.0390							
.0600		-.0190	-.0390	-.0310	.0570	.0430	.0050	-.0030							
.0800				.0790	.1280	.0590	.0190	-.0260							
.0900									.0350						
.1000		-.0810	-.0830	.0470	.0220	.0390	-.0010	-.0150	-.0250						
.1400				.0490	.0120	-.0120	-.0240	-.0220							
.1900		-.0910	-.0870	-.0430	-.0540	-.0610	-.0550	-.0230							
.2650		-.0790		-.0160	.0240	-.0420	.0320	-.0230							
.2900		-.1240	-.1270	-.0130											

AVES 87-757 T9 ORA + 93 + T9 ORBITER FUSELAGE (RBMB16)

MACH (1) = 2.498 BETAT (2) = -8.27

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0173	.0188	.0339	.0682	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3229	.3953	.5129
PHI															
.000	1.2995	.9215	.4995	.1395	.0077	.1495			.1940		.0595	.0195	.0044	-.0479	-.0535
20.000			.5415	.1445	.0895	.1485			.1435		.0615				
40.000			.6385	.1995	.1995	.1385			.1585		.0595	-.0415	-.0479	-.0479	.0595
55.000			.6725	.2195	.1595	.2825			.1995		.1115				
75.000			.5615	.2165	.1385	.3015			.2275		.1485	.0345	-.0355	-.0595	-.0285
90.000		1.1665	.5845	.1995	.1225	.3045			.2445		.2385	.0285	-.0595	-.0595	-.0565
120.000			.4645	.1335	.1135	.1935			.3735		.1195	-.0255	-.0675	-.0995	-.1145
142.000										.0915					
150.000			.3785	.1675	.0885	.1755			.5355		-.0255	-.0595	-.0625	-.0795	-.0995
157.000								.5685							
182.000									.5495						
185.000											-.0835	-.0175	-.0295	-.0525	-.0945
188.000									.4595						
172.000							.5285								
180.000	1.2995	.7545	.2485	.0615	.0845	.1385			.5295		-.1335	-.1345	-.1445	-.1635	-.1285

X/LB	.5873	.6628	.7385	.7869	.8283	.8248	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0385							-.0985		-.0535
40.000	.1075	.0685		.1915	.1355	.1585	-.0285			-.1245
75.000		-.0485	-.0795	-.0875	-.0775	-.1275	-.0475	-.0485		
90.000		-.0445	-.0585	-.0515	.0355	-.0215	-.0115	-.0185		
105.000				.0515	.0995	.0335	-.0125	-.0375		
115.000									.0125	
125.000		-.0915	-.0945	.3835	.2585	.1225	-.1225	-.1285	-.0335	
135.000				.0795	.0955	-.0825	-.1395	-.1345		
150.000		-.0955	-.0935	-.0365	-.0595	-.1495	-.1435	-.1345		
165.000		-.0885		-.0185	.0155	-.0225	.0265	-.0275		
180.000		-.1145	-.1035	-.0895						

MACH (1) = 2.498 BETAT (3) = -4.19

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0173	.0188	.0339	.0682	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3229	.3953	.5129
PHI															
.000	1.3315	.9535	.5275	.1485	-.0185	.0925			.1535		.0945	.0595	.0185	-.0525	-.0765
20.000			.5845	.1725	.0595	.0845			.1585		.0515				
40.000			.6315	.1945	.1925	.1155			.1675		.0515	-.0215	-.0275	-.0185	.0185
55.000			.6355	.1925	.1795	.2355			.1725		.0945				
75.000			.5185	.1675	.1185	.2845			.1995		.1275	.0145	-.0555	-.0775	-.0585
90.000		1.1425	.5425	.1195	.0455	.1845			.2135		.2115	.0595	-.0655	-.0815	-.0815
120.000			.4295	.1145	.0845	.1425			.2915		.1225	-.0195	-.0745	-.1125	-.1195

AMES 87-767 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBMB16)

MACH (1) = 2.498 BETAT (3) = -4.16

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0662	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0330					
150.000			.3990	.0780	.0770	.1400			.5160		-.0480	-.0550	-.0730	-.0830	-.1030
157.000								.5940							
162.000									.5250						
165.000											-.1020	-.0500	-.0400	-.0710	-.0980
169.000									.4740						
172.000							.5280								
180.000	1.3310	.7680	.2490	.0680	.0650	.1120			.6430		-.1340	-.1320	-.1010	-.1450	-.1060

X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0850							-.0830		-.0490
40.000	.0440	.0470		.1460	.0980	.0660	-.0330			-.1170
75.000		-.0690	-.0830	-.0810	-.0920	-.0460	-.0670	-.0660		
90.000		-.0670	-.0740	-.0670	.0130	-.0290	-.0320	-.0380		
105.000				.0320	.0670	.0400	-.0310	-.0470		
115.000									.0150	
125.000		-.0990	-.0950	.3070	.2230	.0000	-.0410	-.0410	-.0460	
135.000				.1110	.1230	-.1140	-.1270	-.0890		
150.000		-.0840	-.0770	-.0130	-.0080	-.1240	-.1130	-.0950		
165.000		-.0830		-.0290	.0360	.0070	.0190	-.0360		
180.000		-.0990	-.0830	-.0640						

MACH (1) = 2.498 BETAT (4) = .06

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0662	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3880	.9940	.5390	.1540	-.0180	.0130			.2080		.1140	.0750	.0310	-.0550	-.1030
25.000			.5380	.1470	.0060	.0030			.1730		.0940				
40.000			.5630	.1480	.1070	.0310			.1440		.0360	.0020	-.0010	-.0660	-.0290
55.000			.5440	.1470	.1160	.0560			.1290		.0710				
75.000			.4980	.1040	.0410	.0590			.1250		.1000	-.0160	-.0750	-.0880	-.0910
90.000		.9540	.4350	.0510	.0210	.0740			.1120		.1340	-.0160	-.0750	-.0960	-.1030
120.000			.3470	.0500	.0320	.0750			.1150		.0600	-.0580	-.0860	-.1020	-.1110
142.000										-.0390					
150.000			.3110	.0510	.0540	.0950			.4290		-.0890	-.1060	-.0990	-.0850	-.0820
157.000								.5950							
162.000									.4510						
165.000											-.1310	-.1240	-.0910	-.0670	-.0670
169.000									.4680						
172.000							.7050								

AMES 97-7x7 [illegible] 2A + 33 + 79 ORBITED FUSELAGE (PAGE:6)

MACH (1) = 2.490 BETA' (4) = .0 DEG

SECTION (1)ORBITED FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0180	.0339	.0492	.1355	.1548	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5122
PHI															
180.000	1.3888	.7946	.2548	.0499	.0480	.0119			.6403		-.1630	-.1270	-.1190	-.0559	-.0598

X/LB	.5873	.6929	.7380	.7999	.8293	.9048	.9292	.9539	1.0015	1.0392
PHI										
.000	.0182							-.0379		-.0377
45.000	.0198	.0722		.0722	.1208	-.0110	-.0548			-.0499
75.000		-.0999	-.1248	-.0179	-.0801	-.0101	-.0502			
90.000		-.0999	-.0999	-.0401	-.0259	-.0598	-.0379	-.0599		
105.000				.0180	.0211	-.0259	-.0701	-.0779		
115.000								-.0999		
120.000		-.0779	-.0999	.0802	.0119	-.0401	-.0699	-.0599	-.0621	
135.000				.0999	.0221	-.0879	-.0999	-.0479		
150.000		-.0779	-.0487	.0488	.0379	-.0599	-.0248	-.0939		
165.000		-.0779		.0229	.0179	.0459	.0959	-.0459		
180.000		-.0779	-.0779	-.0621						

MACH (1) = 2.490 BETA' (5) = 4.3 DEG

SECTION (1)ORBITED FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0180	.0339	.0492	.1355	.1548	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5122
PHI															
.000	1.3958	.7488	.2198	.0398	-.0208	.0498			.1438		.0078	.0998	.0118	-.0518	-.0718
20.000			.0938	.0408	-.0458	.0118			.1058		.0628				
40.000			.0478	.0188	.0098	.0028			.0228		.0328	-.0248	-.0398	-.0988	-.0258
55.000			.0418	.0118	.0028	-.0198			.0078		.0098				
75.000			.0738	.0338	4.7218	-.0218			.0358		.0568	-.0628	-.0828	-.0328	-.0168
90.000		.0288	.0218	-.0128	-.0288	.0138			.0108		.0588	-.0338	-.0778	-.0128	-.0218
120.000			.0258	-.0228	-.0198	.0328			.0938		-.0198	-.0148	-.0998	-.0198	-.0948
142.000										-.0848					
150.000			.0928	.0198	.0088	.0778			.0398		-.0118	-.0418	-.0218	-.0088	-.0478
157.000								.0398							
180.000									.0428						
195.000											-.0498	-.0478	-.0278	-.0098	-.0488
180.000									.0458						
172.000							.0428								
180.000	1.3958	.7908	.2418	.0598	.0488	.0988			.0218		-.0398	-.0398	-.0198	-.0498	-.0118

X/LB	.5873	.6929	.7380	.7999	.8283	.9048	.9292	.9539	1.0015	1.0392
PHI										
.000	-.0482							-.0982		-.0488
[illegible]	-.0378	.0988		-.0248	-.0178	-.0338	-.0128			-.0988

AMES 97-717 TA3 CEA + 33 + 75 ORBITER FUSELAGE (PANEL)

MACH (1) = 2.496 BETA (5) = 4.33

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/L	.0473	.0825	.1739	.2559	.3283	.5248	.7092	.9539	1.1115	1.3392
Z=1										
2.199		-.1599	-.1159	-.1122	-.1052	-.1048	-.1199	-.1141		
3.199		-.1277	-.1059	-.1059	-.1057	-.1073	-.1043	-.1059		
5.199				-.1131	-.1142	-.1099	-.1099	-.1031		
11.199									-.1599	
12.199		-.1057	-.1099	-.1011	-.1029	-.1039	-.1029	-.1013	-.1052	
15.199				.1242	.1173	-.1033	-.1159	-.1147		
17.199		-.1037	-.1011	.1599	.1339	-.1113	-.1022	-.1059		
19.199		-.1011		.1211	.1142	.1122	-.1019	-.1134		
19.199		-.1094	-.1099	-.1139						

MACH (1) = 2.496 BETA (5) = 9.49

SECTION (1) ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/L	.0000	.0175	.0488	.0339	.0812	.1355	.1945	.2501	.2732	.3953	.2259	.2711	.3201	.3953	.5122
Z=1															
.199	1.3198	.9599	.4699	.1248	-.1029	.1339			.1799		.1448	.1139	-.1093	-.1599	-.1922
2.199			.4711	.1119	-.1157	.1699			.1429		.1339				
4.199			.4359	.1699	-.1209	.1157			.1119		.1099	-.1511	-.1099	-.2199	-.1699
99.199			.3999	.1933	.1999	-.1429			-.1139		.1429				
7.199			.3145	.1191	-.1442	-.1429			.1122		.1211	-.1339	-.1699	-.2111	-.1279
9.199		.7439	.2548	-.1499	-.1993	-.1139			-.1139		.1339	-.1522	-.1991	-.2112	-.1179
12.199			.2139	-.1279	-.1481	-.1297			.1591		-.1511	-.1279	-.2121	-.2199	-.1911
142.199										-.2148					
19.199			.2208	.1922	.1991	.1498			.2599		-.1322	-.1579	-.1379	-.1779	-.1759
197.199								.3795							
192.199									.4199						
195.199											-.1699	-.1579	-.1339	-.2148	-.1779
199.199									.4459						
172.199							.4598								
199.199	1.3198	.7929	.2598	.1499	.1579	.1992			.9121		-.1339	-.1439	-.1549	-.1999	-.1339

X/L	.0473	.0825	.1739	.2559	.3283	.5248	.7092	.9539	1.1115	1.3392
Z=1										
.199	-.1379							-.1148		-.1779
0.199	-.1139	.1599		-.1119	-.1047	-.1779	-.1148			-.1779
7.199		-.1111	-.1119	-.1111	-.1999	-.1199	-.1117	-.1199		
9.199		-.1021	-.1099	-.1099	-.1999	-.1199	-.1148	-.1199		
11.199				-.1191	-.1021	-.1179	-.1121	-.1139		
11.199									-.1121	
12.199		-.1599	-.1179	.1597	.1999	-.1119	-.1139	-.1179	-.1179	
15.199				.1148	.1221	-.1199	-.1199	-.1199		
17.199		-.1599	-.1599	.1119	.1122	-.1139	-.1148	-.1148		

AMES 87-747 IA9 02A + S3 + T9 ORBITER FUSELAGE (PBNB16)

MACH (1) = 2.498 BETAT (6) = 6.48

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
183.000		-.0900		-.0370	.0870	-.0330	-.0590	-.0490		
189.000		-.1150	-.1560	-.0980						

MACH (1) = 2.498 BETAT (7) = 8.68

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1546	.1801	.1732	.1958	.2259	.2711	.3246	.3953	.5126
PHI															
.000	1.2780	.8990	.4320	.0780	-.0290	.0680			.0180		.0490	-.0270	-.0430	-.0330	-.0240
2.000			.3910	.0580	-.0310	.1120			.0490		.0010				
4.000			.3570	.0270	-.0320	.0870			.0580		-.0670	-.0830	-.0990	-.1290	-.1540
55.000			.3190	.0280	-.0220	-.0670			-.0590		-.0140				
7.000			.2470	-.0620	-.0710	-.0340			.0000		.0320	-.0520	-.0920	-.1220	-.1330
9.000		.6850	.2250	-.0760	-.0710	-.0350			-.0190		.0110	-.0670	-.0940	-.1160	-.1170
12.000			.1790	-.0520	-.0590	-.0370			-.0490		-.0740	-.1350	-.1170	-.1540	-.1090
142.000										-.1180					
150.000			.1990	-.0130	-.0460	-.0140			.0220		-.1430	-.1550	-.1530	-.1090	-.1102
157.000								.4180							
162.000									.0930						
165.000											-.1750	-.1770	-.1460	-.1580	-.1210
169.000									.0440						
172.000							.4150								
180.000	1.2780	.7440	.2310	.0440	.0520	.1090			.0830		-.1360	-.1250	-.1790	-.1850	-.1610

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0250							-.0990		-.0710
4.000	-.0670	-.0480		-.0510	-.0330	-.0920	-.1020			-.0850
75.000		-.1120	-.1180	-.1160	-.0930	-.0990	-.1130	-.1030		
9.000		-.0850	-.0970	-.0750	-.0730	-.0840	-.1010	-.1060		
105.000				-.0270	-.0580	-.0840	-.0990	-.1020		
111.000									-.0730	
120.000		-.1140	-.1020	.0090	.0110	-.1110	-.1170	-.0980	-.0890	
135.000				.2970	.2410	-.1120	-.0980	-.0770		
150.000		-.1180	-.1260	-.0580	-.0660	-.1590	-.1370	-.1140		
165.000		-.1230		-.0550	.0080	-.0970	-.0990	-.0780		
180.000		-.1300	-.1340	-.1130						

AMES 97-717 IA9 OEA + 33 + T9 ORBITER FUSELAGE (EBNB16)

MACH (2) = 2.949 BETA (1) = -8.53

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5125
RHI															
.0000	1.1980	.8440	.3990	.0380	.0120	.0240			.0390		-.0090	.0170	-.0170	-.0410	-.0190
2.0000			.4890	.0720	.0140	.0810			.0160		-.0090				
4.0000			.5170	.1730	.1130	.2810			.1420		.0590	.0110	-.0470	-.0290	.0200
53.0000			.5880	.2340	.1790	.3530			.2790		.1840				
7.0000			.5390	.2340	.1540	.3420			.2930		.2190	.0930	.0230	-.0040	-.0040
9.0000		1.1220	.5120	.2030	.1440	.1790			.3110		.2790	.0950	.0150	-.0210	-.0290
12.0000			.5110	.1770	.1350	.1610			.2650		.1750	.0330	-.0150	-.0480	-.0680
142.0000										.0990					
15.0000			.3920	.1130	.0990	.1540			.5390		-.0050	-.0260	-.0340	-.0380	-.0590
157.0000								.5790							
182.0000									.5650						
185.0000											-.0400	-.0090	.0090	-.0190	-.0590
199.0000									.4850						
172.0000							.4790								
19.0000	1.1580	.7320	.2520	.0720	.0410	.0650			.5930		-.0650	-.0920	-.1110	-.1240	-.1240

X/LB	.5873	.6825	.7380	.7969	.8283	.8948	.9252	.9639	1.0015	1.0392
RHI										
.0000	-.0330							-.1010		-.0790
4.0000	.1470	.0790		.1920	.1880	.1240	.0380			-.0750
7.0000		-.0310	-.0580	-.0370	-.0410	.0120	-.0110	-.0090		
9.0000		-.0240	-.0440	-.0350	.0540	.0270	.0150	.0220		
10.0000				.0240	.0160	.0120	.0330	.0110		
11.0000									.0430	
12.0000		-.0090	-.0730	.0380	.0270	.0690	.0220	.0150	.0250	
135.0000				.0280	.0110	-.0730	-.0940	-.0970		
15.0000		-.0560	-.0750	-.0450	-.0440	-.0190	-.0110	-.0570		
185.0000		-.0580		-.0250	.0010	-.0590	.0110	-.0270		
.0000		-.0130	-.0190	-.0060						

MACH (2) = 2.99 BETA (2) = -6.39

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0198	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5125
RHI															
.0000	1.2740	.8990	.4110	.0390	.0240	-.0150			.0990		.0260	.0180	.0240	-.0130	-.0320
2.0000			.4790	.0660	.0210	.0130			.0550		.0090				
4.0000			.5210	.1540	.0990	.2170			.1170		.0520	.0240	-.0440	-.0330	.0220
55.0000			.5410	.2220	.1370	.3320			.2400		.1530				
7.0000			.5290	.2090	.1150	.1580			.2610		.1880	.0890	.0240	-.0210	-.0310
9.0000		1.1120	.5550	.1630	.1120	.1430			.1710		.2450	.0990	-.0090	-.0360	-.0440
12.0000			.4630	.1440	.1120	.1490			.2140		.1450	.0230	-.0240	-.0560	-.0770

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB16)

MACH (2) = 2.999 BETAT (2) = -6.380

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0670					
150.000			.3780	.1930	.0900	.1350			.5050		-.0250	-.0390	-.0410	-.0460	-.0630
157.000								.5820							
162.000									.5380						
165.000											-.0520	-.0440	-.0170	-.0230	-.0620
169.000									.4770						
172.000							.5270								
180.000	1.2740	.7480	.2550	.0780	.0630	.0630			.6150		-.0890	-.0950	-.0930	-.1090	-.1170

X/LB	.5073	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0490							-.0650		-.0650
40.000	.0500	.0680		.1570	.1320	.0750	.0240			-.0880
75.000		-.0470	-.0720	-.0880	-.0580	-.0150	-.0240	-.0280		
90.000		-.0430	-.0610	-.0590	.0220	.0130	-.0410	.0420		
105.000				-.0030	.0500	.0730	.0180	-.0070		
115.000									.0500	
125.000		-.0770	-.0790	.2890	.1630	.0480	.0070	-.0030	-.0120	
135.000				.0750	.0960	-.0750	-.0950	-.0860		
150.000		-.0800	-.0810	-.0460	-.0420	-.1110	-.1000	-.0710		
165.000		-.0760		-.0340	-.0490	-.0400	.0080	-.0360		
180.000		-.0970	-.0880	-.0750						

MACH (2) = 2.999 BETAT (3) = -4.230

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3170	.9220	.4330	.0650	.0440	-.0340			.1500		.0680	.0640	.0480	-.0090	-.0530
25.000			.4810	.0780	.0650	-.0320			.1160		.0410				
40.000			.5800	.1390	.0940	.1690			.1220		.0470	.0040	-.0270	-.0340	.0090
55.000			.6480	.1710	.1140	.1520			.2130		.1300				
70.000			.5890	.1710	.0870	.1190			.2380		.1610	.0480	-.0130	-.0380	-.0520
90.000		1.0000	.5170	.1340	.0840	.1180			.1280		.2020	.0490	-.0180	-.0460	-.0620
125.000			.4330	.1250	.0950	.1230			.1450		.0890	.0010	-.0300	-.0670	-.0860
142.000										.0390					
150.000			.3670	.0980	.0610	.1230			.4710		-.0400	-.0520	-.0550	-.0570	-.0680
157.000								.5690							
162.000									.5120						
165.000											-.0610	-.0660	-.0500	-.0380	-.0640
169.000									.4790						
180.000							.5380								

AMES 07-7J7 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RBNB16)

MACH (2) = 2.999 BETAT (3) = -4.23

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5125
PHI															
180.000	1.3175	.7895	.2675	.0605	.0695	.0915			.6345		-.0925	-.0985	-.0925	-.1035	-.1035

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0715							-.0965		-.0575
45.000	.0405	.1265		.1215	.0925	.0295	-.0255			-.0975
70.000		-.0685	-.0835	-.0785	-.0715	-.0495	-.0585	-.0465		
90.000		-.0645	-.0765	-.0745	-.0675	-.0275	-.0345	-.0175		
105.000				-.0165	.0115	.0375	-.0145	-.0215		
115.000									.0275	
120.000		-.0855	-.0855	.1965	.1395	.0975	-.0245	-.0185	-.0275	
135.000				.0715	.0825	-.0915	-.1165	-.0825		
150.000		-.0625	-.0825	-.0375	-.0285	-.1155	-.1135	-.0845		
165.000		-.0865		-.0315	-.0265	-.0335	-.0235	-.0435		
180.000		-.0885	-.0795	-.0795						

MACH (2) = 2.999 BETAT (4) = .05

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5125
PHI															
.000	1.3545	.9755	.4745	.0775	.0215	-.0385			.1215		.1655	.0645	.0695	-.0085	-.0535
25.000			.4945	.0855	.0385	-.0365			.1265		.1195				
40.000			.5445	.1135	.0725	-.0295			.0935		.0555	.0235	-.0025	-.0185	-.0495
55.000			.5415	.1155	.0655	.0275			.0485		.0985				
70.000			.4995	.1185	.0295	-.0455			.0515		.0945	.0155	-.0405	-.0565	-.0715
90.000		.9385	.4315	.0725	.0295	-.0575			.0495		.0575	.0045	-.0395	-.0615	-.0785
120.000			.3485	.0765	.0465	-.0645			.0615		.0115	-.0625	-.0575	-.0675	-.0855
142.000										-.0295					
150.000			.3215	.0795	.0645	-.0895			.3855		-.0625	-.0865	-.0865	-.0795	-.0635
157.000								.5505							
162.000									.4615						
165.000											-.0885	-.0975	-.0885	-.0685	-.0525
169.000									.4765						
172.000							.5965								
180.000	1.3545	.7885	.2725	.0815	.0725	.1005			.6545		-.1045	-.0985	-.0915	-.0725	-.0455

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0785							-.1185		-.0365
45.000	-.0315	.0405		.0415	.0155	-.0415	-.0955			-.0975

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RSNB16)

MACH (2) = 2.999 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
7.000		-.0910	-.1000	-.0950	-.0720	-.1010	-.1120	-.0730		
9.000		-.0880	-.0900	-.0550	-.0400	-.0810	-.0910	-.0530		
105.000				-.0270	-.0260	-.0810	-.0780	-.0520		
110.000									-.0620	
120.000		-.0790	-.0750	.0190	.0610	-.0860	-.0740	-.0390	-.0430	
135.000				.0610	.0810	-.0790	-.1000	-.0270		
150.000		-.0670	-.0680	.0150	.0580	-.0870	-.0740	-.0220		
165.000		-.0580		-.0370	.0640	.0000	-.0300	-.0330		
180.000		-.0550	-.0590	-.0560						

MACH (2) = 2.999 BETAT (5) = 4.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3130	.9200	.4330	.0650	.0430	-.0390			.1430		.0780	.0650	.0450	-.0060	-.0480
2.000			.4240	.0580	.0290	-.0330			.1640		.0990				
4.000			.4400	.0620	.0410	-.0250			.0720		.0460	.0160	-.0090	-.0480	-.0790
55.000			.4220	.0510	.0140	-.0220			-.0070		.0240				
75.000			.3720	.0500	-.0170	-.0430			-.0010		.0150	-.0060	-.0380	-.0650	-.0790
90.000		.8620	.3160	.0100	-.0210	.0070			-.0170		.0090	-.0500	-.0450	-.0610	-.0830
120.000			.2520	.0280	.0050	.0180			.0040		-.0250	-.0840	-.0870	-.0690	-.0720
142.000										-.0430					
150.000			.2650	.0440	.0360	.0620			.2910		-.0750	-.1030	-.0980	-.0810	-.0450
157.000								.4980							
162.000									.4430						
165.000											-.1040	-.1060	-.0970	-.0790	-.0540
169.000									.4700						
172.000							.4960								
180.000	1.3130	.7710	.2620	.0770	.0670	.0840			.6230		-.0930	-.0960	-.0940	-.1060	-.1030

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0680							-.0890		-.0500
40.000	-.0720	-.0110		-.0020	-.0080	-.0380	-.0980			-.0490
7.000		-.0980	-.0980	-.0880	-.0740	-.0810	-.0920	-.0770		
9.000		-.0880	-.0870	-.0680	-.0580	-.0620	-.0750	-.0690		
105.000				-.0530	-.0560	-.0520	-.0730	-.0680		
110.000									-.0350	
120.000		-.0720	-.0780	.0370	-.0030	-.0520	-.0710	-.0470	-.0430	
135.000				.1380	.1130	-.0730	-.0700	-.0420		
150.000		-.0620	-.0580	.0280	.1320	-.0410	-.0670	-.0490	—	

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB16)

MACH (2) = 2.999 BETAT (5) = 4.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0580		-.0280	.0700	.0110	-.0330	-.0340		
180.000		-.0860	-.0780	-.0670						

MACH (2) = 2.999 BETAT (6) = 6.580

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2840	.8750	.4050	.0570	.0460	-.0330			.0810		.0290	.0130	.0170	-.0110	-.0270
2.000			.3870	.0450	.0310	-.0490			.1370		.0620				
4.000			.3850	.0370	.0320	-.0380			.0940		.0210	-.0180	-.0290	-.0670	-.0960
55.000			.3590	.0200	-.0030	-.0280			-.0210		.0040				
75.000			.3070	.0150	-.0380	-.0190			-.0150		.0140	-.0240	-.0450	-.0750	-.0840
90.000		.7220	.2590	-.0170	-.0430	-.0130			-.0220		-.0690	-.0550	-.0530	-.0670	-.0860
120.000			.2250	.0070	-.0150	-.0030			-.0210		-.0410	-.0910	-.0920	-.0780	-.0620
142.000										-.0600					
150.000			.2420	.0300	.0220	.0370			.2420		-.0840	-.1160	-.1080	-.0850	-.0540
157.000								.4140							
162.000									.4310						
165.000											-.1130	-.1110	-.1030	-.0940	-.0780
169.000									.4540						
172.000							.4480								
180.000	1.2840	.7550	.2540	.0710	.0630	.0690			.6030		-.0880	-.0990	-.1070	-.1150	-.1140

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1440							-.0870		-.0570
4.000	-.1570	-.0870		.0640	-.0420	-.0450	-.0920			-.0580
7.000		-.0960	-.0970	-.0900	-.0790	-.0810	-.0910	-.0790		
9.000		-.1040	-.0850	-.0730	-.0610	-.0670	-.0760	-.0700		
105.000				-.0430	-.0620	-.0700	-.0740	-.0740		
110.000									-.0240	
120.000		-.0740	-.0790	.0320	-.0170	-.0930	-.0820	-.0600	-.0520	
135.000				.1990	.1590	-.0660	-.0770	-.0600		
150.000		-.0740	-.0750	-.0610	.0880	-.0910	-.1040	-.0730		
165.000		-.0740		-.0390	.0370	-.0570	-.0680	-.0550		
180.000		-.0940	-.0850	-.0750						

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (F3N216)

MACH (2) = 2.999 BETAT (7) = 8.75

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1420	.8400	.3790	.0470	.0240	.0270			.0520		-.0490	.0180	-.0260	-.0460	-.0210
2.000			.3510	.0220	.0170	-.0290			.0440		.0110				
4.000			.3380	.0210	-.0030	-.0470			.0890		-.0230	-.0540	-.0710	-.0920	-.1030
55.000			.3110	-.0060	-.0290	-.0410			-.0350		-.0140				
7.000			.2570	-.0470	-.0570	-.0340			-.0180		.0050	-.0370	-.0540	-.0770	-.0980
9.000		.8490	.2120	-.0360	-.0550	-.0290			-.0340		-.0210	-.0620	-.0650	-.0720	-.0940
12.000			.1930	-.0510	-.0320	-.0250			-.0190		-.0620	-.1040	-.1050	-.1040	-.0990
142.000										-.0720					
15.000			.2120	.0170	.0110	.0150			.2060		-.0920	-.1170	-.1140	-.0910	-.0880
157.000								.3940							
162.000									.4110						
165.000											-.1220	-.1160	-.1090	-.1170	-.1220
169.000									.4380						
172.000							.3800								
180.000	1.1420	.7390	.2480	.0680	.0580	.0790			.5790		-.0870	-.0970	-.1210	-.1280	-.1310

X/LB	.5873	.6628	.7380	.7959	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1240							-.1020		-.0740
4.000	-.1830	-.0340		-.0450	-.0710	-.0870	-.0930			-.0720
7.000		-.0940	-.0990	-.0930	-.0830	-.0920	-.1010	-.0840		
9.000		-.0870	-.0890	-.0790	-.0680	-.0780	-.0930	-.0770		
105.000				-.0420	-.0610	-.0870	-.0950	-.0760		
110.000									-.0290	
120.000		-.0790	-.0870	.0360	-.0130	-.0870	-.1030	-.0770	-.0640	
135.000				.1910	.1590	-.0860	-.0910	-.0580		
150.000		-.1120	-.0960	-.0620	-.0640	-.0390	-.0230	-.0910		
165.000		-.1150		-.0670	-.0220	-.0310	-.0160	-.0450		
180.000		-.0160	-.0100	-.0260						

MACH (3) = 3.502 BETAT (1) = -8.69

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1380	.6110	.3840	.0370	.0060	-.0180			.0340		.0240	-.0020	.0070	-.0250	-.0400
2.000			.4620	.0770	.0230	.1120			.0720		.0120				
4.000			.5790	.1510	.0980	.3230			.1930		.0980	.0500	-.0140	-.0370	.0110
55.000			.6020	.1600	.1520	.1810			.0930		.1590				
7.000			.6170	.2070	.1420	.1790			.3130		.2310	.1090	.0420	.0110	-.0050
9.000		1.1240	.6000	.2580	.1310	.1710			.1770		.2000	.1130	.0310	-.0030	-.0210
12.000			.4980	.2030	.1290	.1640			.1410		.1410	.0330	.0000	-.0310	-.0530

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB16)

MACH (3) = 3.502 BETAT (1) = -8.690

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
142.000										.0920					
150.000			.3880	.1160	.0960	.1360			.5080		-.0010	-.0250	-.0250	-.0350	-.0440
157.000								.5700							
162.000									.5560						
165.000											-.0250	-.0220	-.0140	-.0030	-.0440
169.000									.4910						
172.000							.5480								
180.000	1.1380	.7330	.2490	.0740	.0630	.0730			.5830		-.0640	-.0750	-.0870	-.0860	-.1040

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0410							-.0860		-.0780
40.000	.0000	.0530		.1570	.1300	.0900	.0440			-.0530
70.000		-.0290	-.0520	-.0430	-.0360	.0060	-.0060	-.0040		
90.000		-.0300	-.0390	-.0360	.0140	.0280	.0180	.0240		
105.000				.0030	.0470	.0790	.0490	.0270		
110.000									.0160	
120.000		-.0610	-.0630	.2610	.2060	.0790	.0500	.0290	.0190	
135.000				.0610	.1020	-.0600	-.0690	-.0640		
150.000		-.0610	-.0670	-.0410	-.0320	-.0920	-.0850	-.0640		
165.000		-.0630		-.0350	-.0150	-.0510	-.0460	-.0240		
180.000		-.1010	-.0910	-.0730						

MACH (3) = 3.502 BETAT (2) = -6.500

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5120
PHI															
.000	1.1720	.8710	.4140	.0490	.0140	-.0420			.1210		.0360	.0160	-.0030	.0040	-.0320
20.000			.4710	.0810	.0240	-.0240			.0600		.0240				
40.000			.5880	.0790	.0870	.1210			.1740		.0710	.0390	-.0260	-.0400	-.0070
55.000			.6170	.1260	.1320	.1360			.2520		.1690				
70.000			.5730	.1720	.1110	.1250			.1360		.1930	.0870	.0230	-.0060	-.0230
90.000		.9860	.5460	.1710	.1120	.1270			.1480		.1940	.0860	.0180	-.0170	-.0370
120.000			.4620	.1760	.1060	.1290			.1410		.0830	.0110	-.0040	-.0390	-.0620
142.000										.0680					
150.000			.3770	.1070	.0870	.1210			.4740		-.0130	-.0370	-.0380	-.0410	-.0500
157.000								.5600							
162.000									.5220						
165.000											-.0320	-.0420	-.0380	-.0170	-.0430
169.000									.4830						
172.000							.5450								

AMES 87-707 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RBNB16)

MACH (3) = 3.502 BETAT (2) = -6.500

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.1720	.7630	.2620	.0800	.0670	.0730			.6040		-.0640	-.0740	-.0830	-.0840	-.0990

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0400							-.0770		-.0650
40.000	-.0420	.0390		.1460	.1080	.0530	.0300			-.0620
70.000		-.0460	-.0670	-.0550	-.0520	-.0200	-.0270	-.0190		
90.000		-.0460	-.0550	-.0500	-.0120	-.0140	-.0040	.0030		
105.000				-.0170	.0190	.0200	.0250	.0050		
110.000									.0290	
120.000		-.0690	-.0720	.1950	.1460	.0300	.0240	.0060	.0010	
135.000				.0500	.0920	-.0350	-.0770	-.0640		
150.000		-.0690	-.0730	-.0480	-.0360	-.0880	-.0870	-.0660		
165.000		-.0690		-.0450	-.0200	-.0470	-.0120	-.0310		
180.000		-.0960	-.0880	-.0680						

MACH (3) = 3.502 BETAT (3) = -4.320

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2170	.9110	.4490	.0690	.0200	-.0330			.0630		.0860	.1010	.0480	.0180	-.0300
20.000			.4860	.0920	.0400	-.0357			.0880		.0520				
40.000			.5740	.1300	.0840	.0260			.1580		.0620	.0260	-.0130	-.0250	-.0090
55.000			.5990	.1350	.1070	.0840			.2200		.1430				
70.000			.5640	.1410	.0840	.0750			.1000		.1700	.0630	.0060	-.0180	-.0390
90.000		.9480	.5020	.1410	.0810	.0750			.0970		.1560	.0720	.0080	-.0260	-.0460
120.000			.4280	.1410	.0900	.1020			.1120		.0510	-.0110	-.0130	-.0430	-.0630
142.000										.0450					
150.000			.3600	.1000	.0810	.1070			.4300		-.0230	-.0430	-.0490	-.0450	-.0560
157.000								.5430							
162.000									.4960						
165.000											-.0410	-.0530	-.0540	-.0350	-.0440
169.000									.4780						
172.000							.5110								
180.000	1.2170	.7790	.2680	.0850	.0700	.0840			.6260		-.0650	-.0760	-.0740	-.0790	-.0870

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0530							-.0760		-.0470
40.000	.0010	.0070		.1250	.0750	.0260	.0010			-.0700

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AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB16)

MACH (3) = 3.502 BETAT (3) = -4.320

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0590	-.0750	-.0650	-.0630	-.0390	-.0410	-.0350		
90.000		-.0600	-.0670	-.0620	-.0280	-.0160	-.0240	-.0180		
105.000				-.0360	-.0040	-.0150	.0000	-.0120	-.0150	
110.000									-.0130	
120.000		-.0740	-.0750	.1420	.1070	-.0060	.0400	-.0110		
135.000				.0510	.0700	-.0480	-.0810	-.0660		
150.000		-.0690	-.0730	-.0450	-.0320	-.0870	-.0860	-.0660		
165.000		-.0710		-.0450	-.0180	-.0350	-.0250	-.0410		
180.000		-.0770	-.0730	-.0630						

MACH (3) = 3.502 BETAT (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3550	.9930	.5100	.0600	-.0140	-.0360			.0240		.1510	.0660	.0550	.0110	-.0270
20.000			.5210	.0860	-.0170	-.0370			.0370		.1030				
40.000			.5620	.0840	.0350	-.0330			.0460		.0540	.0140	.0000	-.0040	-.0290
55.000			.5510	.0980	.0690	.0140			.0230		.0610				
70.000			.4990	.0960	.0390	.0240			.0370		.0320	.0120	-.0250	-.0410	-.0560
90.000		.9270	.4180	.0960	.0380	.0370			.0410		.0170	-.0270	-.0270	-.0440	-.0630
120.000			.3470	.0820	.0490	.0560			.0340		.0040	-.0550	-.0600	-.0490	-.0710
142.000										.0420					
150.000			.3160	.0760	.0600	.0800			.0490		-.0500	-.0700	-.0710	-.0680	-.0580
157.000								.5130							
162.000									.0460						
165.000											-.0700	-.0790	-.0740	-.0670	-.0550
169.000									.0470						
172.000							.5240								
180.000	1.3550	.7870	.2690	.0840	.0670	.0890			.0520		-.0830	-.0820	-.0750	-.0680	-.0540

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0520							-.0810		-.0360
40.000	-.0530	-.0220		.0140	-.0010	-.0280	-.0630			-.0780
70.000		-.0810	-.0920	-.0850	-.0740	-.0730	-.0790	-.0620		
90.000		-.0810	-.0890	-.0720	-.0530	-.0630	-.0620	-.0500		
105.000				-.0490	-.0410	-.0560	-.0500	-.0440		
110.000									-.0150	
120.000		-.0760	-.0760	.0010	.0250	-.0560	-.0480	-.0370	-.0400	
135.000				.0250	.0500	-.0550	-.0730	-.0390		
150.000		-.0630	-.0650	-.0050	.0280	-.0620	-.0540	-.0350		

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB16)

MACH (3) = 3.902 BETAT (4) = .050

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0550		-.0420	.0310	.0080	-.0150	-.0320		
180.000		-.0520	-.0540	-.0500						

MACH (3) = 3.502 BETAT (5) = 4.470

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5120
PHI															
.000	1.2080	.9100	.4420	.0670	.0150	-.0350			.0620		.0810	.0910	.0410	.0100	-.0330
20.000			.4390	.0730	.0150	-.0360			.0420		.1140				
40.000			.4560	.0710	.0160	-.0310			.0600		.0290	.0060	-.0210	-.0270	-.0570
55.000			.4340	.0720	.0230	-.0310			-.0130		-.0680				
70.000			.3730	.0710	-.0050	-.0130			-.0680		-.0180	-.0410	-.0410	-.0550	-.0670
90.000		.7780	.3060	.0250	-.0040	.0010			-.0020		-.0130	-.0540	-.0640	-.0510	-.0690
125.000			.2680	.0390	.0110	.0160			-.0030		-.0240	-.0720	-.0800	-.0750	-.0660
142.000										-.0250					
150.000			.2660	.0510	.0370	.0530			.2610		-.0640	-.0830	-.0860	-.0780	-.0640
157.000								.4620							
162.000									.4440						
165.000											-.0850	-.0860	-.0850	-.0770	-.0650
172.000									.4660						
180.000	1.2080	.7810	.2640	.0760	.0640	.0770	.4490		.6170		-.0760	-.0800	-.0800	-.0870	-.0940

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0580							-.0790		-.0500
40.000	-.0780	-.0880		-.0250	-.0330	-.0600	-.0910			-.0570
70.000		-.0900	-.0940	-.0880	-.0810	-.0820	-.0920	-.0720		
90.000		-.0830	-.0860	-.0770	-.0710	-.0740	-.0920	-.0660		
105.000				-.0680	-.0720	-.0720	-.0770	-.0640		
110.000									.0080	
120.000		-.0690	-.0730	.0160	-.0740	-.0720	-.0760	-.0570	-.0500	
135.000				.0740	.0710	-.0740	-.0760	-.0590		
150.000		-.0580	-.0650	.0050	.0800	-.0450	-.0630	-.0540		
165.000		-.0580		-.0400	.0390	-.0180	-.0460	-.0340		
180.000		-.0820	-.0790	-.0710						

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB16)

MACH (3) = 3.502 BETAT (6) = 6.680

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1570	.8660	.4160	.0570	.0230	-.0480			.1160		.0260	.0040	-.0170	-.0660	-.0360
20.000			.3970	.0510	.0240	-.0500			.0290		.0560				
40.000			.3950	.0510	.0080	-.0430			-.0350		.0230	-.0190	-.0290	-.0500	-.0790
55.000			.3710	.0520	-.0020	-.0420			-.0350		-.0170				
70.000			.3100	.0510	-.0260	-.0290			-.0280		-.0280	-.0430	-.0470	-.0610	-.0760
90.000		.7000	.2570	.0460	-.0260	-.0130			-.0240		-.0290	-.0620	-.0660	-.0590	-.0730
120.000			.2280	.0150	-.0050	-.0040			-.0290		-.0360	-.0780	-.0840	-.0800	-.0570
142.000										-.0380					
150.000			.2370	.0350	.0260	.0360			.2170		-.0630	-.0870	-.0910	-.0810	-.0610
157.000								.4210							
162.000									.4240						
165.000											-.0870	-.0940	-.0860	-.0820	-.0670
169.000									.4410						
172.000							.4110								
180.000	1.1570	.7590	.2550	.0700	.0590	.0670			.5890		-.0700	-.0840	-.0880	-.0910	-.1060

X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0390							-.0840		-.0510
40.000	-.0820	-.0620		-.0480	-.0340	-.0810	-.0920			-.0490
70.000		-.0950	-.0940	-.0850	-.0810	-.0990	-.0910	-.0890		
90.000		-.0800	-.0850	-.0800	-.0770	-.0950	-.0940	-.0690		
105.000				-.0660	-.0720	-.0940	-.1020	-.0710		
110.000									-.0230	
120.000		-.0870	-.0750	.0060	-.0670	-.1020	-.1030	-.0760	-.0610	
135.000				.0970	.1200	-.1020	-.0920	-.0640		
150.000		-.0730	-.0760	-.0280	.0310	-.1030	-.1070	-.0660		
165.000		-.0810		-.0500	-.0430	-.0810	-.0860	-.0530		
180.000		-.0940	-.0870	-.0710						

MACH (3) = 3.502 BETAT (7) = 8.900

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1150	.8020	.3700	.0330	.0460	-.0240			.0820		.0150	-.0050	.0030	-.0320	-.0410
20.000			.3400	.0260	.0050	-.0500			.0630		-.0030				
40.000			.3280	.0230	-.0180	-.0500			-.0420		-.0330	-.0560	-.0630	-.0740	-.0890
55.000			.3060	.0260	-.0270	-.0480			-.0420		-.0370				
70.000			.2480	.0230	-.0430	-.0380			-.0330		-.0450	-.0510	-.0580	-.0650	-.0730
90.000		.9970	.2020	-.0190	-.0390	-.0310			-.0410		-.0420	-.0730	-.0740	-.0640	-.0750
120.000			.1860	-.0480	-.0240	-.0240			-.0590		-.0540	-.0860	-.0930	-.0880	-.0640

AMES 87-707 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNB16)

MACH (3) = 3.500 BETAT (7) = 8.900

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										-.0500					
150.000			.2080	.0210	.0130	.0160			.1770		-.0740	-.0960	-.0960	-.0870	-.0890
157.000								.4010							
162.000									.4040						
165.000											-.0940	-.0970	-.0940	-.0980	-.1100
169.000									.4200						
172.000							.3990								
180.000	1.1150	.7340	.2440	.0680	.0530	.0640			.5670		-.0690	.0790	-.0000	-.0970	-.1140

X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0410							-.0990		-.0730
40.000	-.0910	-.0740		-.0490	-.0470	-.0860	-.0930			-.0690
70.000		-.0910	-.0990	-.0890	-.0860	-.0890	-.0930	-.0710		
90.000		-.0830	-.0910	-.0830	-.0770	-.0820	-.0910	-.0770		
105.000				-.0660	-.0650	-.0930	-.0910	-.0800		
110.000									-.0390	
120.000		-.0740	-.0830	.0030	-.0640	-.0930	-.0910	-.0840	-.0680	
135.000				.1060	.0860	-.0830	-.0890	-.0670		
150.000		-.1030	-.1030	-.0750	-.0790	-.1200	-.1100	-.0840		
165.000		-.1080		-.0840	-.0670	-.0930	-.1000	-.0850		
180.000		-.1060	-.0980	-.0790						

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-70' IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB17) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0500 SCALE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

MACH (1) = 2.499 BETAT (1) = -8.390

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6980	.9740	.4120	.0340	.0780	.2890			.1560		.0690	.1030	.0480	.0210	-.0050
20.000			.5100	.0630	.0930	.3820			.2030		.1040				
40.000			.6820	.1410	.1480	.4070			.2640		.1340	.0830	.0760	.0430	.1440
55.000			.7730	.2370	.2120	.5250			.4840		.3860				
70.000			.8330	.2720	.2370	.3440			.5370		.4660	.1980	.0900	.1110	.1360
90.000		1.4510	.8690	.3260	.2640	.3440			.4420		.4790	.1920	.1110	.0940	.1070
120.000			.8940	.4190	.3750	.4270			.5510		.3.9?	.1410	.1260	.0940	.0870
142.000										.2140					
150.000			.8470	.4110	.4220	.5300			1.1270		.1210	.0760	.1050	.1020	.0750
157.000								1.3230							
162.000									1.1140		.0210	.0760	.0970	.1130	.0790
165.000															
169.000									.9980						
172.000							1.2560								
180.000	1.6980	1.3320	.6640	.3710	.3740	.5700			1.2610		-.0310	-.0240	.0050	.0060	-.0490

X/LB	.5875	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0120							-.1420		-.1350
40.000	.1180	.1110		.2140	.1290	.0850	-.0310			-.1360
70.000		.0790	.0480	.0510	.1190	.1130	.0880	.0900		
90.000		.0930	.0610	.1280	.1680	.1700	.1200	.0880		
105.000				.2250	.2430	.1720	.1110	.0750		
110.000									.1520	
120.000		.0840	.0750	.5280	.3700	.1700	.1160	.1050	.0930	
135.000				.5440	.4880	.0590	.0540	.0690		
150.000		.0610	.0540	.1730	.2470	-.0100	.0840	.1630		
165.000		.0650		.1980	.3540	.2480	.2940	.1730		
180.000		-.0880	-.0680	-.0280						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB17)

MACH (1) = 2.499 BETAT (2) = -6.280

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7070	.9790	.4870	.0340	.1050	.2510			.1630		.1080	.1050	.0540	.0260	.0020
20.000			.5350	.0700	.1190	.2790			.2260		.1110				
40.000			.6550	.1540	.1410	.1970			.2670		.1330	.0920	.0550	.0340	.1110
55.000			.7130	.2160	.1860	.2650			.4440		.3560				
70.000			.7630	.2270	.1980	.2870			.3250		.4230	.1720	.0700	.0900	.1050
90.000		1.3880	.8040	.2770	.2120	.2760			.3650		.4110	.1700	.0930	.0750	.0830
125.000			.8390	.3710	.3340	.3770			.4690		.2440	.0720	.1140	.0780	.0690
142.000										.1720					
150.000			.8180	.3720	.4040	.4990			1.0730		.1050	.0430	.0540	.0800	.0650
157.000								1.2780							
162.000									1.0770						
165.000											.0480	.0380	.0550	.0920	.0670
169.000									.9970						
172.000							1.2700								
180.000	1.7070	1.3390	.6650	.3710	.3800	.5580			1.2710		-.0310	-.0250	.0110	.0200	-.0120

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0150							-.1450		-.1270
40.000	.0920	.0980		.1700	.0970	.0480	-.0470			-.1420
70.000		.0600	.0300	.0320	.0820	.0680	.0640	.0690		
90.000		.0770	.0430	.0910	.1280	.1510	.1020	.0650		
105.000				.1940	.2040	.1510	.0910	.0520		
115.000									.1330	
120.000		.0720	.0620	.4700	.3030	.1520	.0960	.0890	.0760	
135.000				.5550	.4680	.0430	.0550	.0800		
150.000		.0500	.0490	.1820	.2820	.0080	.1050	.1740		
165.000		.0490		.1960	.3620	.2760	.2840	.1510		
180.000		-.0380	-.0410	.0590						

MACH (1) = 2.498 BETAT (3) = -4.160

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7160	.9630	.4390	.0180	.0210	.2160			.1140		.1200	.1560	.0760	.0880	.0390
20.000			.4780	.0500	.0510	.2080			.2210		.1280				
40.000			.5930	.1140	.0830	.1240			.2890		.1220	.0840	.0660	.0270	.0990
55.000			.6500	.1120	.1380	.2250			.3290		.3240				
70.000			.6910	.1740	.1450	.2230			.2440		.3930	.1520	.0470	.0710	.0860
90.000		1.3280	.7380	.2280	.1620	.2110			.2740		.2620	.1470	.0760	.0490	.0650
120.000			.7920	.3310	.2930	.3170			.4330		.1950	.0140	.0830	.0650	.0530

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB17)

MACH (1) = 2.498 BETAT (3) = -4.160

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1320					
150.000			.7920	.3550	.3820	.5070			1.0140		.0760	.0190	.0230	.0600	.0230
157.000								1.2170							
162.000									1.0380						
165.000											-.0110	.0040	.0330	.0440	.0240
169.000									1.0030						
172.000							1.2330								
180.000	1.7160	1.3530	.6700	.3770	.3820	.5820			1.2850		-.0360	-.0240	.0080	.0130	-.0180

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0040							-.1460		-.1240
40.000	.0370	.0370		.1240	.0730	.0040	-.0700			-.1530
70.000		-.0020	-.0290	.0140	.0600	.0730	.0500	.0520		
90.000		.0190	-.0120	.0790	.1010	.1240	.0840	.0510		
105.000				.1600	.1450	.1250	.0750	.0420		
110.000									.1090	
120.000		.0190	.0080	.3930	.2560	.0890	.0720	.0770	.0650	
135.000				.5680	.4640	.0910	.0460	.0880		
150.000		.0060	.0030	.1910	.3230	.0350	.1240	.1830		
165.000		.0020		.1890	.3840	.2850	.2770	.1310		
180.000		-.0400	-.0370	.0970						

MACH (1) = 2.498 BETAT (4) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7140	.9550	.4100	.0120	.0310	.2330			.0930		.0540	.1930	.1200	.0770	.0410
20.000			.4210	-.0190	.0300	.2270			.1110		.0730				
40.000			.5020	.0260	.0270	.2010			.1510		.1210	.0610	.0840	.0570	.0610
55.000			.5340	.0280	.0380	.1520			.1900		.2730				
70.000			.5510	.0880	.0600	.1270			.1510		.2650	.0970	.0130	.0330	.0530
90.000		1.1870	.5930	.1330	.0780	.1070			.1850		.1210	.0240	.0490	.0080	.0360
120.000			.6710	.2470	.2110	.2070			.2150		.0930	-.0460	-.0390	.0320	.0270
142.000										.0680					
150.000			.7190	.3120	.3300	.4110			.8850		.0250	-.0330	-.0160	.0020	.0440
157.000								1.1400							
162.000									.9530						
165.000											-.0400	-.0400	-.0020	.0090	.0400
169.000									.9970						
172.000							1.2590								

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB17)

MACH (1) = 2.490 BETAT (4) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.7140	1.3600	.6680	.3730	.3830	.5140			1.2800		-.0450	-.0670	-.0080	.0160	.0180
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0340							-.1300		-.1040					
40.000	.0390	.0450		.0340	-.0150	-.0660	-.1070			-.1490					
70.000		.0280	-.0030	-.0480	.0350	.0320	-.0080	.0160							
90.000		.0500	.0190	.0740	.0680	.0650	.0310	.0160							
105.000				.1210	.0730	.0640	.0240	.0080							
110.000									.0920						
120.000		.0460	.0470	.2660	.1760	-.0240	.0110	.0480	.0410						
135.000				.5980	.4660	-.0240	.0230	.0750							
150.000		.0390	.0500	.2550	.4570	.0870	.1510	.1520							
165.000		.0450		.2190	.4060	.2950	.2510	.1190							
180.000		.0530	.0480	.0510											

MACH (1) = 2.490 BETAT (5) = 4.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7070	.9840	.4850	.0340	.0820	.2490			.1090		.1130	.1520	.0690	.0750	.0430
20.000			.4680	.0340	.0610	.1770			.0850		.1070				
40.000			.4750	.0350	.0480	.0660			.1040		.0630	.1370	.0810	.0450	.0180
55.000			.4560	.0380	.0450	.0750			.0830		.1290				
70.000			.4380	.0350	.0310	.0780			.1220		.1040	-.0050	-.0050	.0130	.0480
90.000		1.0320	.4660	.0550	.0160	.0710			.1090		.0500	-.0410	-.0560	-.0050	.0260
120.000			.5620	.1710	.1460	.1490			.1610		.0230	-.0820	-.0830	-.0440	.0240
142.000										.0180					
150.000			.6470	.2710	.2950	.3510			.7540		-.0170	-.0680	-.0350	-.0200	-.0060
157.000								.9870							
162.000									.9190						
165.000											-.0650	-.0490	-.0140	.0050	-.0160
169.000									.9570						
172.000							1.1720								
180.000	1.7070	1.3580	.6590	.3850	.3850	.5340			1.2670		-.0370	-.0690	.0060	.0100	.0240
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0420							-.1470		-.1170					
40.000	.0120	.0220		-.0370	-.0680	-.1020	-.1400			-.1060					

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB17)

MACH (1) = 2.498 BETAT (5) = 4.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9635	1.0015	1.0392
PHI										
70.000		.0260	-.0060	-.0010	.0350	.0280	-.0030	-.0060		
90.000		.0440	.0190	.0600	.0410	.0420	.0070	-.0040		
105.000				.0870	.0220	.0420	-.0060	-.0120		
110.000									.0610	
120.000		.0420	.0400	.2320	.0920	-.0730	-.0590	-.0030	.0110	
135.000				.7090	.4510	-.0240	-.0480	.0120		
150.000		.0330	.0400	.2250	.6120	.1210	.1140	.0940		
165.000		-.0090		.1290	.3650	.2470	.1510	.0760		
180.000		.0070	.0120	.0670						

MACH (1) = 2.499 BETAT (6) = 6.470

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6980	.9870	.4570	.0320	.0640	.2410			.1510		.1120	.1010	.0480	.0220	.0040
20.000			.4370	.0260	.0460	.2080			.1010		.1140				
40.000			.4250	.0180	.0210	.0710			.0890		.0530	.1130	.0520	.0190	-.0040
55.000			.3960	.0170	.0110	.0710			.0860		.1030				
70.000			.3780	-.0070	.0040	.0440			.0930		.0940	-.0230	-.0540	.0010	.0400
90.000		.9910	.4040	.0240	-.0120	.0330			.0480		-.0480	-.0740	-.0650	-.0350	.0170
120.000			.5030	.1480	.1150	.1000			.0960		-.0160	-.1040	-.1080	-.0820	-.0110
142.000										-.0050					
150.000			.6070	.2520	.2670	.3730			.7050		-.0360	-.0790	-.0520	-.0330	-.0120
157.000								1.0260							
162.000									.8930						
165.000											-.0340	-.0540	-.0220	-.0210	-.0530
169.000									.9840						
172.000							1.2110								
180.000	1.6980	1.3500	.6540	.3630	.3790	.5090			1.2560		-.0340	-.0260	.0090	.0090	-.0030

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0230							-.1580		-.1240
40.000	-.0010	.0110		-.0680	-.0870	-.1300	-.1510			-.1090
70.000		.0270	-.0070	-.0060	.0210	.0250	-.0060	-.0120		
90.000		.0380	.0120	.0550	.0430	.0290	-.0050	-.0160		
105.000				.0850	.0140	.0270	-.0180	-.0230		
110.000									.0590	
120.000		.0360	.0310	.2030	.0630	-.0930	-.0710	-.0410	-.0260	
135.000				.7150	.4450	-.0290	-.0410	-.0330		
150.000		-.0450	-.0380	.1200	.3510	.1340	.0970	.0780		

AMES 87-707 IA9 OPA + S3 + T9 ORBITER FUSELAGE (RBNB17)

MACH (1) = 2.499 BETAT (6) = 6.470

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0800		.1130	.3900	.1330	.1030	.0350		
180.000		-.0330	-.0310	.0620						

MACH (1) = 2.499 BETAT (7) = 8.000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0642	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6840	.9760	.4060	.0340	.0800	.2830			.1450		.0950	.1050	.0440	.0240	.0020
20.000			.3720	.0260	.0490	.2120			.1170		.0690				
40.000			.3750	.0120	.0080	.0910			.0510		.0050	.0020	-.0260	-.0160	-.0120
55.000			.3620	-.0220	-.0140	.0670			.0190		.0930				
70.000			.3380	-.0310	-.0160	.0200			.0800		.0970	-.0270	-.0690	-.0120	.0370
90.000		.9330	.3590	-.0010	-.0310	.0000			.0090		-.0410	-.0900	-.0770	-.0610	.0070
120.000			.4630	.1150	.0990	.0660			.0630		-.0430	-.1220	-.1210	-.0850	-.0410
142.000										-.0230					
150.000			.5770	.2390	.2450	.3160			.0360		-.0510	-.0910	-.0600	-.0310	-.0210
157.000								.9260							
162.000									.0780						
165.000											-.1030	-.0560	-.0280	-.0530	-.0780
169.000									.0740						
172.000							1.1290								
180.000	1.6840	1.3390	.6510	.3630	.3780	.5370			1.2380		-.0280	-.0250	.0080	.0230	-.0490

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0070							-.1460		-.1340
40.000	-.0120	.0070		-.0750	-.0990	-.1550	-.1590			-.1320
70.000		.0310	-.0030	-.0030	.0240	.0290	-.0490	-.0210		
90.000		.0280	.0030	.0310	.0520	.0180	-.0180	-.0280		
109.000				.0960	.0320	.0190	-.0280	-.0260		
115.000									.0320	
120.000		.0180	.0110	.2130	.0330	-.1010	-.0890	-.0530	-.0470	
135.000				.4290	.3880	-.0550	-.0710	-.0590		
150.000		-.0900	-.0570	.0510	.1810	.1040	.0590	.0360		
165.000		-.0850		.0600	.2130	.0590	.0260	-.0400		
180.000		-.0780	-.0580	-.0010						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB17)

MACH (2) = 2.999 BETAT (1) = -8.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8790	1.6140	.4250	.0270	.0420	.1490			.1840		.1280	.1010	.1040	.0370	.0230
20.000			.5190	.0620	.0450	.1420			.3150		.1390				
40.000			.7060	.1700	.1040	.1710			.4270		.2070	.1400	.0630	.0880	.0820
55.000			.8090	.2230	.2070	.2490			.3090		.4490				
70.000			.8860	.2850	.2440	.2470			.2840		.5070	.2580	.1430	.1510	.1420
90.000		1.5970	.9460	.3610	.2700	.2770			.3110		.2890	.2280	.1690	.1260	.1230
120.000			.9600	.4350	.3870	.4170			.5560		.2940	.0920	.0750	.1300	.0930
142.000										.2670					
150.000			.8990	.4350	.4240	.5120			1.2010		.1230	.0920	.0680	.0800	.0830
157.000								1.3810							
162.000									1.2540						
165.000											.0720	.0760	.0830	.0600	.0930
169.000									1.1410						
172.000							1.2820								
180.000	1.8790	1.4540	.7040	.3930	.3750	.5170			1.4500		.0100	.0010	.0190	-.0170	-.0210

X/LB	.5873	.6625	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0010							-.1340		-.1070
40.000	.1410	.1480		.2460	.1990	.1070	.0220			-.0830
70.000		.0770	.0340	.0410	.0910	.0870	.0590	.0910		
90.000		.0900	.0570	.0680	.1380	.1510	.1250	.1240		
105.000				.1830	.1810	.1980	.1250	.1140		
110.000									.1490	
120.000		.0380	.0740	.5250	.3660	.1070	.1770	.1440	.1280	
135.000				.5550	.5010	.0480	.0360	.0900		
150.000		.0750	.0730	.1750	.2570	-.0170	.0080	.1430		
165.000		.0820		.1760	.3130	.1910	.2510	.1690		
180.000		-.0650	-.0510	-.0190						

MACH (2) = 2.999 BETAT (2) = -4.240

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.9130	1.6110	.4180	.0230	.0330	.2010			.1390		.0580	.1410	.1080	.0600	.0350
20.000			.4800	.0440	.0310	.1240			.2060		.1340				
40.000			.6170	.1160	.0670	.1430			.1490		.1970	.1160	.0870	.0610	.0550
55.000			.6880	.1610	.1290	.1920			.1990		.3640				
70.000			.7450	.2120	.1570	.1750			.1890		.2430	.1730	.1040	.0980	.1020
90.000		1.4660	.8030	.2680	.1820	.1840			.2060		.1850	.0660	.0870	.0880	.0820
120.000			.8540	.3750	.3080	.3170			.4340		.2070	.0360	.0290	.0560	.0680

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB17)

MACH (2) = 2.999 BETAT (2) = -4.24

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0138	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1870					
150.000			.8480	.3710	.3930	.4650			1.0750		.0910	.0500	.0290	.0320	.0570
157.000								1.2960							
162.000									1.1780						
165.000											.0410	.0240	.0390	.0340	.0480
169.000									1.1450						
172.000							1.2990								
180.000	1.9130	1.4970	.7200	.4040	.3990	.5270			1.4890		.0030	.0000	.0230	.0180	.0190

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0320							-.1520		-.1030
4.000	.0760	.0830		.1610	.1090	.1070	-.0590			-.0990
7.000		.0440	.0060	.0110	.0400	.0180	.0070	.0520		
9.000		.0580	.0280	.0360	.0790	.0780	.0630	.0760		
115.000				.1450	.1120	.1030	.0560	.0690		
119.000									.1070	
120.000		.0680	.0610	.0490	.0740	.0120	.0350	.0970	.0910	
135.000				.0610	.0470	.0120	.0170	.0530		
150.000		.0630	.0570	.0740	.0060	-.0110	.0280	.1320		
165.000		.0600		.1630	.0260	.0220	.0320	.1480		
180.000		.0230	.0110	.0630						

MACH (2) = 2.799 BETAT (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.9240	1.5110	.4160	.1230	.0280	.2760			.1360		.0520	.1620	.1510	.1450	.0580
2.000			.4470	.0300	.0260	.2430			.1610		.0540				
4.000			.5320	.0700	.0210	.1360			.1860		.0990	.0870	.1010	.0550	.0810
55.000			.5750	.0710	.0650	.0980			.1090		.1980				
7.000			.6080	.1310	.0850	.0920			.0960		.1390	.0450	.0490	.0560	.0690
9.000		1.3170	.6610	.1780	.1050	.1040			.1360		.0740	-.0140	-.0210	.0490	.0480
120.000			.7350	.2900	.2320	.2050			.2570		.1170	-.0170	-.0110	-.0250	.0410
142.000										.1310					
150.000			.7790	.3480	.3450	.3980			.9370		.0530	-.0020	-.0020	.0140	.0120
157.000								1.2220							
162.000									1.1150						
165.000											.0040	-.0150	.0080	.0250	.0210
169.000									1.1410						
2.000							1.3150								

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB17)

MACH (2) = 2.999 BETAT (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.9240	1.5140	.7240	.4020	.3940	.4740			1.4900		-.0190	.0080	.0250	.0230	.0250

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0370							-.0940		-.0970
40.000	.0630	.0390		.0870	.0320	-.0270	-.0270			-.1120
70.000		.0230	-.0050	-.0050	.0250	.0420	.0240	.0200		
90.000		.0430	.0190	.0520	.0610	.0710	.0520	.0340		
105.000				.1120	.0690	.0730	.0510	.0270		
110.000									.0970	
120.000		.0530	.0460	.2340	.1730	.0690	.0080	.0480	.0530	
135.000				.5430	.4600	.0870	.0360	.0450		
150.000		.0460	.0470	.2190	.3970	.0750	.1050	.1330		
165.000		.0370		.1540	.3280	.2720	.2430	.1420		
180.000		.0250	.0420	.0490						

MACH (2) = 2.939 BETAT (4) = 4.410

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.9030	1.4430	.4110	.0450	.0470	.2020			.1410		.0750	.1370	.0980	.0610	.0340
20.000			.4140	.0380	.0390	.1400			.1280		.0310				
40.000			.4570	.0330	.0300	.0860			.0930		.0360	.0580	.1170	.0430	.0480
55.000			.4720	.0510	.0180	.0620			.0740		.1110				
70.000			.4810	.0510	.0250	.0640			.0650		.0190	-.0040	-.0430	.0230	.0370
90.000		1.1580	.5290	.1440	.0410	.0390			.0770		-.0420	-.0620	-.0570	-.0460	.0140
120.000			.6140	.2130	.1630	.1580			.1720		.0450	-.0570	-.0540	-.0560	-.0230
142.000										.0770					
150.000			.6930	.3020	.2960	.3240			.7920		.0180	-.0450	-.0250	-.0150	-.0150
157.000								1.0640							
162.000									1.0790						
165.000											-.0310	-.0380	-.0430	.0150	-.0240
169.000									1.1370						
172.000							1.2120								
180.000	1.9030	1.4980	.7110	.3930	.3870	.4830			1.4660		-.0140	-.0060	.0230	.0140	.0130

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0230							-.1280		-.1050
40.000	.0250	.0080		.0170	-.0430	-.0580	-.0920			-.1220

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AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE

MACH (2) = 2.999 BETAT (4) = 4.410

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		.0230	-.0050	-.0040	.0180	.0300	-.0140	.0030		
90.000		.0320	.0160	.0510	.0510	.0340	.0130	.0120		
105.000				.0840	.0350	.0350	.0130	.0050		
110.000									.0740	
120.000		.0320	.0330	.1870	.1180	-.0380	-.0360	-.0090	.0130	
135.000				.6790	.4300	.0070	-.0020	.0150		
150.000		-.0020	.0100	.1620	.6150	.0990	.0940	.0710		
165.000		-.0190		.0690	.3650	.1950	.1120	.0720		
180.000		.0200	.0090	.0460						

MACH (2) = 2.999 BETAT (5) = 8.760

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.0810	1.0480	.4100	.0230	.0350	.1930			.1760		.1200	.0920	.0930	.0300	.0220
20.000			.3040	.0110	.0210	.1670			.1250		.0780				
40.000			.4030	.0080	-.0420	.0780			.0700		-.0030	.0240	-.0140	-.0430	-.0280
55.000			.3940	.0080	-.0070	.0180			.0470		.0850				
70.000			.3780	.0120	-.0170	.0180			.0360		.0600	-.0240	-.0550	-.0240	.0180
90.000		1.0150	.4070	.0380	-.0490	-.0670			.0000		-.0550	-.0970	-.0690	-.0680	-.0130
120.000			.5090	.1490	.1590	.0910			.0850		-.0490	-.0840	-.0840	-.0780	-.0790
142.000										.0330					
150.000			.6140	.2590	.2530	.2950			.0690		-.0120	-.0680	-.0440	-.0290	-.0110
157.000								.9910							
162.000									1.0280						
165.000											-.0670	-.0410	-.0110	-.0310	-.0540
169.000									1.1070						
172.000							1.1330								
180.000	1.0810	1.0480	.6030	.3770	.3730	.4850			1.4210		.0010	-.0120	.0060	-.0050	-.0260

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0080							-.1200		-.1190
40.000	-.0350	-.0150		-.0080	-.0510	-.0690	-.1120			-.1440
70.000		.0180	-.0040	.0000	-.0050	.0570	.0200	.0020		
90.000		-.0010	-.0150	-.0170	.0320	.0100	-.0130	-.0250		
105.000				.0570	.0200	.0100	-.0190	-.0180		
110.000									.0040	
120.000		.0010	-.0030	.1370	.0220	-.0610	-.0530	-.0380	-.0310	
135.000				.3140	.2080	-.0430	-.0690	-.0700		
-.000		-.0600	-.0610	.0590	.1880	.0180	.0520	.0000		

AMES 87-707 IA9 CEA + S3 + T9 ORBITER FUSELAGE (RBNB17)

MACH (2) = 2.999 BETAT (5) = 0.700

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
165.000		-.0580		.0530	.1370	.0510	.0180	-.0310		
180.000		-.0640	-.0540	-.0180						

MACH (3) = 3.502 BETAT (1) = -0.700

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3214	.3933	.5128
PHI															
.000	2.0750	1.0780	.4480	.0740	.0390	.1190			.2010		.1280	.1290	.1030	.0690	.0480
20.000			.5380	.0620	.0280	.1160			.2130		.2020				
40.000			.7480	.1890	.1060	.2320			.1270		.2710	.1760	.1090	.0810	.0820
55.000			.8670	.2900	.2160	.2150			.2660		.4240				
70.000			.9700	.3370	.2550	.2480			.2560		.3120	.2670	.1750	.1630	.1510
90.000		1.7840	1.0440	.4050	.2990	.2800			.2860		.2920	.1350	.1550	.1900	.1320
125.000			1.0570	.4840	.4090	.4320			.5830		.2970	.1101	.0680	.1140	.1140
142.000										.2910					
150.000			.9830	.4580	.4380	.5210			1.2500		.1090	.1010	.0820	.0570	.0740
157.000								1.4440							
162.000									1.3520						
167.000											.1000	.0810	.0960	.0540	.0780
169.000									1.2480						
172.000							1.2930								
180.000	2.0750	1.8070	.7670	.4190	.3870	.4530			1.5670		.1280	.1280	.1160	-.0220	-.0130

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	.0110							-.0970		-.0780
40.000	.0830	.1190		.2580	.2110	.1530	.0680			-.0450
70.000		.0780	.0350	.0370	.0740	.0630	.0590	.0810		
90.000		.0940	.0570	.0640	.1170	.1300	.1360	.1360		
105.000				.1790	.1790	.1810	.1450	.1280		
110.000									.1320	
120.000		.0810	.0730	.5240	.3970	.1130	.1030	.1470	.1380	
135.000				.5160	.5060	.0580	.0220	.0670		
150.000		.0740	.0680	.1620	.2470	-.0140	.0060	.0970		
165.000		.0670		.1590	.2740	.1560	.2180	.1440		
180.000		-.0410	-.0330	-.0230						

AMES 97-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RUN017)

MACH (3) = 3.5#2 BETAT (2) = -8.51%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1381	.1732	.1930	.2259	.2711	.3254	.3953	.5125
PHI															
.000	2.1130	1.0780	.4430	.0570	.0450	.1390			.1780		.0680	.1390	.1010	.0600	.0410
20.000			.5250	.0730	.0370	.1190			.1970		.1730				
40.000			.7530	.1810	.0690	.2220			.1400		.2950	.1810	.1040	.0790	.0730
55.000			.8570	.2470	.1790	.1850			.2270		.2480				
70.000			.8990	.2980	.2140	.2420			.2110		.2620	.1400	.1490	.1370	.1290
90.000		1.0080	.9680	.3550	.2440	.2350			.2320		.2330	.0980	.0740	.1290	.1110
125.000			.9970	.4480	.3670	.3070			.4940		.2540	.0740	.0420	.0630	.0800
142.000										.2580					
150.000			.9550	.4440	.4210	.4940			1.1090		.0490	.0790	.0810	.0380	.0570
157.000								1.4150							
160.000									1.3190						
165.000											.0760	.0520	.0740	.0370	.0480
180.000									1.2540						
172.000							1.3390								
180.000	2.1030	1.0340	.7790	.4260	.3930	.4820			1.0140		.1420	.0270	.0110	.0190	.0070

X/LB	.5075	.6026	.7380	.7869	.8283	.8848	.9502	.9839	1.0015	1.0392
PHI										
.000	.0120							-.0710		-.1010
40.000	.0980	.0820		.1980	.1380	.0910	.0380			-.0570
70.000		.0580	.0180	.0160	.0480	.0750	.0560	.0430		
90.000		.0750	.0410	.0390	.0840	.1230	.1270	.1160		
105.000				.1540	.1390	.1230	.1250	.1490		
110.000									.1480	
120.000		.0710	.0640	.5040	.3380	.1210	.0720	.1190	.1130	
135.000				.5520	.4840	.3540	.3310	.2590		
150.000		.0680	.0590	.1520	.2500	.1070	.0240	.0980		
165.000		.0680		.1390	.2680	.1970	.2410	.1450		
180.000		-.0040	-.0210	.0280						

MACH (3) = 3.502 BETAT (3) = -4.3#9

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0100	.0339	.0602	.1355	.1506	.1381	.1732	.1930	.2259	.2711	.3254	.3953	.5125
PHI															
.000	2.1180	1.0720	.4380	.0550	.0390	.1180			.1990		.0480	.0910	.1270	.0630	.0420
20.000			.4980	.0630	.0420	.1220			.1820		.1140				
40.000			.6520	.1310	.0640	.1580			.1280		.2110	.1550	.1070	.0740	.0630
55.000			.7430	.2180	.1380	.1480			.1790		.1880				
70.000			.8180	.2410	.1720	.1610			.1680		.2080	.1070	.1070	.1130	.1190
90.000		1.0000	.8980	.2980	.1990	.1880			.1790		.1840	.0820	.0600	.0930	.0990
.000			.9340	.4030	.3240	.3270			429)		.2120	.0490	.0210	.0390	.0600

DATE 17 SEP 75 TABULATED PRESSURE DATA - IA9C

AMES 07-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB17)

MACH (3) = 3.502 BETAT (3) = -4.320

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5128
PHI															
142.000										.2190					
150.000			.9210	.4240	.3980	.4540			1.1170		.0730	.0570	.0420	.0240	.0330
157.000								1.3670							
162.000									1.2810						
165.000											.0540	.0330	.0330	.0290	.0380
169.000									1.2480						
172.000							1.3280								
180.000	2.1180	1.6490	.7830	.4250	.3980	.4640			1.6230		.0160	.0250	.0130	.0250	.0190
X/LB	.5873	.6626	.7380	.7888	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0160							-.0780		-.0770					
40.000	.0510	.0650		.1540	.1280	.0660	.0120			-.0710					
70.000		.0440	.0270	.0480	.0330	.0640	.0410	.0450							
90.000		.0590	.0280	.0270	.0660	.0930	.1050	.0880							
105.000				.1350	.1170	.0940	.0970	.0810							
110.000									.0960						
120.000		.0650	.0540	.4580	.2940	.09*	.0520	.0690	.0920						
135.000				.5430	.4750	.0440	.0330	.0540							
150.000		.0620	.0540	.1460	.2770	.0210	.0360	.0980							
165.000		.0580		.1410	.275	.2270	.2220	.1480							
180.000		.0170	.0150	.0520											

MACH (3) = 3.502 BETAT (4) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5128
PHI															
.000	2.1180	1.6860	.4260	.0520	.0420	.1890			.1560		.0590	.0770	.1380	.1040	.0710
25.000			.4610	.0460	.0350	.0990			.1700		.0710				
40.000			.5620	.0860	.0310	.0780			.1270		.1040	.1190	.0930	.0730	.0480
55.000			.6210	.1330	.0790	.0720			.0950		.1190				
70.000			.6650	.1590	.0990	.0920			.0840		.1190	.0310	.0120	.0590	.0650
90.000		1.4470	.7260	.2090	.1240	.1160			.1080		.0980	.0070	-.0040	.0190	.0480
120.000			.8160	.3190	.2480	.2140			.2930		.1370	.0120	-.0220	-.0070	.0140
142.000										.1610					
150.000			.8370	.3750	.3500	.3870			.9690		.0540	.0170	.0110	.0070	.0120
157.000								1.2840							
162.000									1.2200						
165.000											.0220	.0040	.0100	.0170	.0420
169.000									1.2370						
172.000							1.3650								

AMES 87-707 IA9 OBA + 83 + T9 ORBITER FUSELAGE (RUN817)

MACH (3) = 3.502 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3234	.3953	.5128
PHI															
180.000	2.1180	1.8390	.7830	.4230	.3970	.4810			1.8130		.2030	.1850	.0190	.0380	.1870
X/LB	.5875	.6026	.7380	.7900	.8203	.8848	.9202	.9839	1.0019	1.0392					
PHI															
.000	.0440							-.1170		-.0790					
40.000	.0810	.0510		.0910	.0490	-.0380	-.0870			-.1850					
70.000		.0190	-.0070	-.0250	.0190	-.0220	-.0280	.0210							
90.000		.0410	.0180	.0270	.0840	.0130	-.0070	.0300							
105.000				.1240	.0870	.1000	-.0110	.0330							
115.000									.0940						
125.000		.0490	.0410	.1930	.1910	.0010	-.0060	.0190	.0420						
135.000				.4280	.4530	.1000	-.0270	.0430							
150.000		.0330	.0370	.1720	.3480	.0010	.0050	.1130							
165.000		.0230		.1180	.2690	.1780	.1390	.1290							
180.000		.0180	.0170	.0310											

MACH (3) = 3.502 BETAT (3) = 4.490

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0180	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3234	.3953	.5128
PHI															
.000	2.1040	1.8820	.4270	.3640	.3620	.1110			.1590		.0790	.1110	.1110	.0630	.1480
20.000			.4320	.3480	.3560	.1040			.1410		.0480				
40.000			.4900	.3540	.3480	.1020			.1620		.0490	.1410	.0790	.1020	.1300
55.000			.5180	.3730	.3370	.1740			.1780		.0770				
70.000			.5310	.3910	.3480	.1720			.1490		.0430	.0140	-.0010	.0040	.0390
90.000		1.2780	.5790	.1310	.1670	.1760			.0550		.0010	-.0330	-.0330	-.0320	.0090
120.000			.6750	.2430	.1840	.1770			.1740		.0770	-.0020	-.0340	-.0360	-.0320
142.000										.1110					
150.000			.7550	.3330	.3090	.3590			.0270		.0020	-.0120	-.0110	-.0040	.0030
157.000								1.2480							
162.000									1.1780						
163.000											-.0250	-.0140	.0150	.0130	.0140
169.000									1.2230						
172.000							1.3140								
180.000	2.1040	1.8810	.7770	.4180	.4000	.4570			1.5930		.0990	.0340	.0180	.0270	.0190
X/LB	.5875	.6026	.7380	.7900	.8203	.8848	.9202	.9839	1.0019	1.0392					
PHI															
.000	.0880							-.1280		-.0770					
40.000	.0380	.0190		.0340	.0150	-.0030	-.0070			-.0910					

AMES 87-707 IA9 CEA + S3 + T9 ORBITER FUSELAGE (RUN817)

MACH (3) = 3.500 BETAT (5) = 4.490

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5875	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		.0130	-.0050	-.0040	.0080	-.0080	-.0300	.0050		
90.000		.0210	.0110	.0310	.0440	-.0040	-.0310	.0160		
105.000				.0740	.1280	-.0190	-.0290	.0670		
110.000									.1080	
120.000		.0240	.0240	.1650	.0740	-.0570	-.0620	-.0080	.0070	
135.000				.6120	.3730	-.0550	-.0290	.0270		
150.000		.0030	.0000	.1310	.4800	.0420	.0280	.0590		
165.000		-.0090		.0210	.2950	.1260	.0390	.0660		
180.000		.0140	.0150	.0430						

MACH (3) = 3.500 BETAT (6) = 6.700

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0189	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3993	.5120
PHI															
.000	2.0790	1.6850	.4350	.0550	.0990	.1350			.1740		.0850	.1330	.1000	.0710	.0410
20.000			.4190	.0430	.0190	.1290			.1300		.0540				
40.000			.4580	.0420	.0010	.0800			.1110		.0250	.0210	.0320	.0030	.0010
55.000			.4710	.0580	.0160	.0460			.0540		.0780				
70.000			.4730	.0560	.0240	.0460			.0290		.0490	-.0100	-.0080	-.0120	.0030
90.000		1.1090	.5110	.0970	.0430	.0410			.0150		-.0040	-.0510	-.0320	-.0490	-.0010
120.000			.6080	.2070	.1520	.1390			.1330		.0480	-.0390	-.0470	-.0340	-.0480
142.000										.0810					
150.000			.7570	.3080	.2850	.3260			.7550		.0260	-.0270	-.0180	-.0180	.0030
157.000								1.1370							
162.000									1.1540						
165.000											-.0260	-.0140	.0090	.0030	-.0140
169.000									1.2110						
172.000							1.2320								
180.000	2.0790	1.6330	.7680	.4100	.3870	.4480			1.5740		.0140	.0230	.0080	.0240	.0030

X/LB	.5875	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0100							-.1180		-.0820
40.000	-.0080	-.0050		.0010	-.0180	-.0770	-.1060			-.0870
70.000		.0100	-.0050	-.0010	.0010	.0010	-.0340	.0010		
90.000		.0070	-.0010	.0070	.0370	-.0090	-.0320	.0000		
105.000				.0670	.0340	-.0160	-.0380	-.0040		
110.000									.0490	
120.000		.0010	.0080	.1190	.0350	-.0640	-.0800	-.0070	.0010	
135.000				.4740	.3190	-.0640	-.0640	-.0220		
150.000		-.0100	-.0250	.0690	.3430	.0630	.0380	.0490		

AMES 87-707 IA9 CEA + S3 + T9 ORBITER FUSELAGE (RUN817)

MACH (3) = 3.502 BETAT (6) = 6.700

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6826	.7360	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0210		.0360	.1950	.0540	.0090	.0150		
180.000		-.0010	-.0210	.0330						

MACH (3) = 3.502 BETAT (7) = 8.910

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3010	.3953	.5120
PHI															
.000	2.0500	1.0610	.4380	.0330	.0440	.1160			.1950		.1270	.1280	.0970	.0600	.0440
20.000			.4080	.0360	.0220	.0940			.1320		.0570				
40.000			.4250	.0330	.0010	.0550			.0780		.0070	.0080	-.0180	-.0450	-.0390
55.000			.4230	.0340	.0020	.0240			.0350		.0040				
70.000			.4140	.0320	.0050	.0260			.0490		.0180	-.0230	-.0430	-.0210	.0030
90.000		1.1090	.4480	.0680	.0170	.0160			-.0120		-.0270	-.0650	-.0640	-.0690	-.0220
125.000			.5500	.1750	.1240	.1110			.1010		.0190	-.0520	-.0640	-.0670	-.0610
142.000										.0620					
150.000			.6630	.2830	.2610	.2660			.6740		.0120	-.0420	-.0310	-.0250	-.0240
157.000								1.0370							
162.000									1.1270						
165.000											-.0410	-.0230	-.0020	-.0210	-.0390
169.000									1.1830						
172.000							1.1410								
180.000	2.0800	1.0120	.7540	.3990	.3810	.4270			1.5350		.0200	.0200	.0030	-.0130	-.0220

X/LB	.5873	.6826	.7360	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392
PHI										
.000	.0100							-.1190		-.0850
40.000	-.0380	-.0910		.0090	-.0370	-.0810	-.0950			-.0820
70.000		.0450	-.0110	-.0090	-.0080	.0170	-.0160	.0020		
90.000		-.0100	-.0230	-.0180	.0190	-.0280	-.0380	-.0170		
109.000				.0390	.0130	-.0300	-.0450	-.0170		
110.000									.0270	
120.000		-.0150	-.0050	.1020	.0130	-.0890	-.0770	-.0950	-.0220	
139.000				.2680	.2300	-.0670	-.0840	-.0520		
150.000		-.0370	-.0480	.0270	.1230	.0620	.0150	.0290		
169.000		-.0420		.0130	.1220	.0120	-.0230	-.0260		
180.000		-.0480	-.0400	-.0280						

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-7D7 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNP18) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .1400 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = -4.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

MACH (1) = 2.499 BETAT (1) = -8.420

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0612	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.5840	.9150	.3930	.0170	.0480	.3190			.1480		.0740	.0910	.0300	-.0060	-.0430
20.000			.4720	.0340	.0530	.3810			.1940		.1830				
40.000			.6490	.1370	.1290	.3500			.2590		.1330	.0700	.0680	.0280	.0800
55.000			.7410	.2130	.1850	.5430			.4350		.3290				
70.000			.7840	.2120	.2130	.3040			.5110		.4670	.1640	.0630	.0720	.0810
90.000		1.3450	.8010	.2880	.2260	.3110			.4310		.4420	.1560	.0760	.0570	.0620
120.000			.7950	.3390	.3080	.3630			.5070		.3290	.1090	.0570	.0540	.0380
142.500										.1820					
150.000			.7240	.3090	.3280	.4150			.9830		.1680	.0450	.0620	.0570	.0270
15 .000								1.1270							
162.000									.9740						
165.000											-.1670	.0410	.0820	.0670	.0280
169.000									.8580						
172.000							1.0370								
180.000	1.5840	1.1780	.5430	.2790	.2790	.4370			1.1920		-.1620	-.0560	-.0330	-.0860	-.1120

X/LB	.5873	.6626	.7580	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0130							-.1399		-.1270
40.000	-.0270	.0980		.2330	.1490	.0530	-.0720			-.1240
70.000		.0230	.0050	.0140	.0670	.0230	-.0060	.0490		
90.000		.0410	.0180	.0800	.1380	.0690	.0280	.0550		
105.000				.1740	.1970	.1120	.0240	.0470		
110.000									.1390	
120.000		.0320	.0180	.3990	.3500	.0610	.0280	.0740	.0590	
135.000				.3760	.3760	-.0280	-.0540	.0160		
150.000		.0140	.0110	.1090	.1480	-.1150	-.0370	.0970		
165.000		.0190		.1300	.2250	.1000	.1660	.1050		
180.000		-.1350	-.0930	-.0480						

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB18)

MACH (1) = 2.498 BETAT (2) = -6.300

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	1.5700	.9280	.4500	.0240	.0530	.2280			.1470		.0690	.0950	.0360	.0030	-.0390
20.000			.4890	.0580	.0690	.3100			.1920		.1060				
40.000			.6130	.1260	.1080	.3370			.2580		.1170	.0570	.0490	.0060	.0550
55.000			.6770	.1320	.1590	.2860			.3970		.2980				
70.000			.7140	.2040	.1670	.2530			.3430		.3770	.1450	.0470	.0470	.0530
90.000		1.2840	.7340	.2370	.1790	.2560			.3100		.3840	.1350	.0590	.0330	.0380
125.000			.7350	.2990	.2680	.3110			.4160		.2150	.0780	.0520	.0330	.0220
142.000										.1350					
150.000			.6960	.2840	.3070	.3870			.9270		.0510	.0090	.0300	.0390	.0190
157.000								1.1000							
162.000									.9290						
165.000											-.0240	.0020	.0220	.0510	.0190
169.000									.8550						
172.000							1.0680								
180.000	1.5700	1.1790	.5440	.2770	.2780	.3940			1.1010		-.0660	-.0640	-.0330	-.0220	-.0720

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0230							-.1520		-.1190
40.000	.1080	.0790		.1840	.1070	.0510	-.0490			-.1360
70.000		.0030	-.0180	-.0100	.0390	.0390	.0180	.0250		
90.000		.0190	-.0030	.0510	.0940	.0840	.0490	.0340		
105.000				.1220	.1410	.0880	.0440	.0240		
110.000									.1050	
120.000		.0190	.0070	.3410	.2650	.0880	.0510	.0490	.0390	
135.000				.3970	.3600	-.0120	-.0090	.0210		
150.000		.0050	-.0010	.1040	.1740	-.0520	.0120	.0880		
165.000		.0060		.1190	.2380	.1750	.1880	.0910		
180.000		-.0910	-.0690	.0420						

MACH (1) = 2.499 BETAT (3) = -4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3210	.3953	.5120
PHI															
.000	1.5840	.9150	.4400	.0120	.0220	.1730			.1180		.1090	.1200	.0650	.0400	-.0310
20.000			.4800	.0420	.0360	.1060			.2060		.0830				
40.000			.5730	.1080	.0700	.0820			.2620		.1510	.0590	.0240	.0080	.0450
55.000			.6160	.1070	.1240	.1980			.3530		.2680				
70.000			.6430	.1560	.1250	.1920			.2170		.3410	.1180	.0240	.0310	.0280
90.000		1.2290	.6680	.1880	.1300	.1930			.2340		.3150	.1090	.0430	.0180	.0120
[illegible]			.6870	.2600	.2260	.2620			.3500		.1570	-.0010	.0470	.0190	.0020

AMES 87-707 IA9 O2A + B3 + T9 ORBITER FUSELAGE (RBNB18)

MACH (1) = 2.499 BETAT (3) = -4.18U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0970					
150.000			.6650	.2650	.2850	.3570			.8750		.1290	-.0170	-.0180	.0150	.0130
157.000								1.0520							
162.000									.8930						
167.000											-.0410	-.0320	-.0150	.0230	.0110
169.000									.8560						
172.000							1.0550								
180.000	1.5840	1.1950	.5480	.2750	.2790	.4010			1.1130		-.0700	-.0630	-.0380	-.0280	-.0290

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0410							-.1450		-.1210
40.000	.0630	.0380		.1300	.0610	.0150	-.0580			-.1530
70.000		-.0210	-.0350	-.0300	.0110	.0190	-.0060	.0040		
90.000		.0000	-.0200	.0200	.0470	.0680	.0320	.0110		
105.000				.0960	.1000	.0670	.0310	-.0010		
110.000									.0790	
120.000		.0650	-.0060	.3290	.2160	.0700	.0320	.0280	.0220	
135.000				.4240	.3550	-.0130	.0000	.0310		
150.000		-.0060	-.0060	.1220	.2260	-.0170	.0520	.1090		
165.000		-.0060		.1270	.2700	.1990	.1910	.0690		
180.000		-.0460	-.0390	.0730						

MACH (1) = 2.499 BETAT (4) = .60

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5910	.9010	.3760	.0030	.0280	.2150			.0960		.0790	.1740	.1140	.0420	-.0310
20.000			.3950	-.0150	.0260	.2150			.1130		.0800				
40.000			.4720	.0140	.0210	.1080			.1590		.1160	.0570	.0730	.0240	.0260
55.000			.4970	.0150	.0250	.1560			.1250		.2250				
70.000			.5070	.0220	.0360	.1040			.1190		.2580	.0730	.0010	.0010	.0020
90.000		1.0990	.5360	.0960	.0490	.0990			.1370		.1070	.0580	.0170	-.0120	-.0040
120.000			.5820	.1770	.1540	.1120			.1820		.0660	-.0620	-.0380	.0000	-.0010
142.000										.0370					
150.000			.6070	.2310	.2480	.3020			.7570		-.0110	-.0640	-.0540	-.0220	.0160
157.000								.9810							
162.000									.8280						
165.000											-.0680	-.0700	-.0430	-.0260	.0140
169.000									.8620						
172.000							1.0740								

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB18)

MACH (1) = 2.499 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.5915	1.2110	.5510	.2730	.2850	.3720			1.1230		-.0770	-.0480	-.0420	-.0240	.0020
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0300							-.1180		-.0890					
40.000	.0010	.0080		.0320	-.0150	-.0590	-.0880			-.1170					
70.000		-.0230	-.0410	-.0420	-.0120	-.0120	-.0240	-.0170							
90.000		-.0690	-.0250	.0270	.0180	.0260	.0010	-.0110							
108.000				.0710	.0390	.0270	-.0070	-.0200							
110.000									.0690						
120.000		.0030	.0010	.2130	.1430	-.0210	-.0110	.0090	.0690						
135.000				.4470	.3820	-.0220	-.0120	.0430							
150.000		.0080	.0100	.1770	.3380	.0360	.0790	.0970							
165.000		.0130		.1680	.3000	.2190	.1780	.0560							
180.000		.0190	.0140	.0150											

MACH (1) = 2.498 BETAT (5) = 4.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5710	.9560	.4380	.0080	.0240	.1910			.1270		.1580	.1310	.0620	.0400	-.0200
20.000			.4180	.0100	.0230	.1670			.0870		.1030				
40.000			.4190	.0110	.0150	.0560			.1020		.1070	.1120	.0510	-.0140	-.0150
55.000			.4010	.0110	.0020	.0660			.0750		.1320				
70.000			.3810	.0100	-.0120	.0390			.0580		.0950	.0310	-.0180	-.0150	-.0180
90.000		.9560	.4030	.0230	-.0170	.0350			.0820		.1230	-.0500	-.0320	-.0250	-.0150
125.000			.4690	.1180	.0080	.0820			.1030		-.1050	-.1010	-.1030	-.0420	-.0040
142.000										-.0130					
150.000			.5330	.1940	.2020	.2380			.0270		-.0500	-.0980	-.0770	-.0580	-.0110
157.000								.0550							
162.000									.0870						
165.000											-.0980	-.0880	-.0580	-.0400	-.0480
180.000									.0490						
172.000							1.0440								
180.000	1.5710	1.2010	.5430	.2720	.2790	.3570			1.0970		-.0750	-.0550	-.0380	-.0320	-.0240
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0300							-.1470		-.1110					
40.000	-.0280	.0010		-.0440	-.0720	-.1110	-.1490			-.0980					

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB18)

MACH (1) = 2.490 BETAT (5) = 4.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0250	-.0420	-.0450	-.0210	-.0230	-.0480	-.0410		
90.000		-.0060	-.0250	.0110	-.0030	-.0050	-.0350	-.0370		
105.000				.0340	-.0140	-.0050	-.0420	-.0450		
110.000									.0050	
120.000		-.0010	-.0050	.1680	.0630	-.0920	-.0780	-.0360	-.0210	
135.000				.5970	.3620	-.0440	-.0430	-.0180		
150.000		.0580	.0040	.1950	.4870	.0550	.0510	.0380		
165.000		-.0240		.0480	.4300	.1760	.0860	.0420		
180.000		-.0390	-.0380	.0630						

MACH (1) = 2.490 BETAT (6) = 6.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1516	.1581	.1732	.1958	.2239	.2711	.3210	.3953	.5120
PHI															
.000	1.5580	.9040	.3880	.0180	.0480	.2380			.1470		.1810	.0850	.0250	-.0110	-.0400
20.000			.3750	.0120	.0250	.1820			.1060		.1810				
40.000			.3680	.0110	.0110	.0450			.0630		.0330	.0790	.0130	-.0410	-.0350
55.000			.3520	.0100	-.0110	.0380			.0520		.0790				
70.000			.3310	-.0270	-.0170	.0150			.0520		.0790	-.0350	-.0280	-.0280	-.0260
90.000		.8930	.3450	-.0050	-.0290	.0110			.0150		-.0410	-.0730	-.0750	-.0330	-.0260
125.000			.4180	.0870	.0610	.0580			.0540		-.0400	-.1210	-.1200	-.0780	-.0120
142.000										-.0360					
150.000			.4980	.1740	.1810	.2350			.0780		-.0670	-.1110	-.0860	-.0680	-.0380
157.000								.0750							
162.000									.0680						
165.000											-.1130	-.0910	-.0660	-.0610	-.0870
169.000									.0420						
172.000							1.0020								
180.000	1.5580	1.1870	.5360	.2670	.2750	.3570			1.0870		-.0690	-.0680	-.0370	-.0260	-.0760

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0250							-.1480		-.1180
40.000	-.0350	-.0180		-.0640	-.1000	-.1380	-.1520			-.1120
70.000		-.0220	-.0440	-.0470	-.0240	-.0220	-.0500	-.0500		
90.000		-.0050	-.0270	.0030	-.0080	-.0110	-.0460	-.0490		
105.000				.0380	-.0240	-.0120	-.0530	-.0560		
110.000									-.0020	
120.000		-.0070	-.0140	.1720	.0410	-.1040	-.0880	-.0690	-.0580	
135.000				.5910	.3750	-.0530	-.0750	-.0540		
150.000		-.0470	-.0540	.0840	.2390	.0630	.0520	.0250		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB18)

MACH (1) = 2.498 BETAT (6) = 6.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0650		.0780	.2940	.0630	.0360	-.0440		
180.000		-.0980	-.0640	.0020						

MACH (1) = 2.498 BETAT (7) = 8.560

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5125
PHI															
.000	1.5490	.9060	.3690	.0020	.0390	.2920			.1240		.0570	.0870	.0190	-.0150	-.0460
20.000			.3350	-.0060	.0140	.2180			.1030		.0360				
40.000			.3330	-.0110	-.0140	.0650			.0180		-.0300	-.0370	-.0570	-.0670	-.0740
55.000			.3160	-.0440	-.0390	.0210			.0420		.0570				
70.000			.2840	-.0560	-.0420	-.0130			.0260		.0670	-.0440	-.0500	-.0430	-.0290
90.000		.8380	.2970	-.0350	-.0560	-.0180			-.0180		-.0360	-.0850	-.0850	-.0500	-.0290
125.000			.3740	.0590	.0330	.0330			.0210		-.0680	-.1400	-.1390	-.0940	-.0290
142.000										-.0990					
150.000			.4620	.1560	.1630	.1930			.0510		-.0820	-.1210	-.1010	-.0670	-.0710
157.000								.7840							
162.000									.7510						
165.000											-.1310	-.0970	-.0760	-.0940	-.1130
169.000									.8340						
172.000							.9360								
180.000	1.5490	1.1790	.5270	.2600	.2700	.3750			1.0640		-.0690	-.0670	-.0490	-.0800	-.1120

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0240							-.1520		-.1240
40.000	-.0730	-.0190		-.1010	-.0940	-.1580	-.1400			-.1260
70.000		-.0180	-.0460	-.0490	-.0250	-.0210	-.0500	-.0570		
90.000		-.0110	-.0350	-.0050	-.0010	-.0190	-.0520	-.0610		
105.000				.0400	-.0240	-.0180	-.0620	-.0620		
110.000									.0010	
120.000		-.0220	-.0230	.1950	.0230	-.1190	-.1060	-.0850	-.0710	
135.000				.3450	.3640	-.0680	-.0830	-.0710		
150.000		-.1120	-.1010	.0000	.0320	.0090	-.0170	-.0270		
165.000		-.1060		.0280	.1360	.0090	-.0320	-.0790		
180.000		-.1420	-.1000	-.0540						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB18)

MACH (2) = 2.999 BETAT (1) = -8.58

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6840	.9200	.3830	.0130	.0300	.0960			.1690		.1080	.0820	.0810	.0140	.0420
20.000			.4740	.0500	.0290	.1140			.3130		.1220				
40.000			.5500	.1260	.0880	.1600			.3220		.1880	.1220	.0510	.0550	.0450
55.000			.7420	.1700	.1810	.2330			.4120		.3610				
70.000			.8090	.2660	.2060	.2150			.2540		.4350	.2240	.1070	.1500	.0870
90.000		1.4410	.8470	.3090	.2220	.2290			.2460		.3040	.1990	.1210	.0890	.0700
120.000			.8240	.3610	.3020	.3370			.4670		.2290	.0640	.0770	.0790	.0500
142.000										.2080					
150.000			.7500	.3240	.3150	.3900			.9990		.0770	.0520	.0370	.0570	.0440
157.000								1.1370							
162.000									1.1490						
165.000											.0370	.0410	.0470	.0480	.0510
169.000									.9500						
172.000							1.0240								
180.000	1.6840	1.2490	.5690	.2890	.2720	.3840			1.2050		-.0210	-.0270	-.0150	-.0520	-.0660

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0310							-.1380		-.1920
40.000	.0990	.0950		.2350	.1870	.1020	.0240			-.1840
70.000		.0280	-.0690	-.1050	.0410	.0450	.0220	.0440		
90.000		.0430	.0130	.0280	.0900	.0890	.0730	.0690		
105.000				.1220	.1230	.1310	.0890	.0770		
110.000									.1090	
120.000		.0350	.0220	.3670	.2930	.0670	.0780	.1000	.1840	
135.000				.2790	.3790	-.0130	-.0190	.0360		
150.000		.0280	.0220	.1010	.1550	-.0630	-.0350	.0730		
165.000		.0350		.1480	.1960	.0980	.1630	.1000		
180.000		-.0980	-.0810	-.0610						

MACH (2) = 2.999 BETAT (2) = -4.26

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1505	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7180	.9150	.3720	.0120	.0130	.1110			.1230		.0570	.0750	.0990	.0380	.0190
20.000			.4320	.0280	.0220	.0930			.1850		.1140				
40.000			.5600	.0920	.0560	.1560			.1280		.1750	.0980	.0570	.0370	.0260
55.000			.6290	.0920	.1060	.1550			.1650		.3180				
70.000			.6760	.1610	.1220	.1380			.1550		.2180	.1590	.0750	.0590	.0490
90.000		1.3220	.7150	.2200	.1420	.1530			.1610		.1590	.0510	.0990	.0500	.0380
120.000			.7280	.2680	.2340	.2530			.3290		.1550	.0110	-.0040	.0460	.0260

AMES 87-707 IA9 OEA + 63 + T9 ORBITER FUSELAGE (RBNB18)

MACH (2) = 2.999 BETAT (2) = -4.26

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.1390					
150.000			.7010	.2940	.2840	.3390			.8870		.0460	.0150	-.0030	-.0020	.0230
157.000								1.0800							
162.000									.9810						
165.000											.0080	-.0090	.0060	.0000	.0250
169.000									.9480						
172.000							1.0620								
180.000	1.7180	1.2880	.5800	.2960	.2800	.3510			1.2420		-.0280	-.0270	-.0170	-.0110	-.0190

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0110							-.1440		-.1020
40.000	.0080	.0480		.1430	.0930	-.0030	-.0530			-.1000
70.000		-.0030	-.0340	-.0330	-.0030	-.0280	-.0450	.0000		
90.000		.0110	-.0170	-.0110	.0180	.0120	.0090	.0340		
105.000				.0730	.0540	.0380	.0160	.0270		
110.000									.0640	
120.000		.0160	.0030	.0320	.0180	-.0220	-.0180	.0500	.0460	
135.000				.0400	.0330	-.0410	-.0500	.0110		
150.000		.0090	.0030	.0090	.0190	-.0600	-.0300	.0710		
165.000		.0110		.0080	.0120	.0370	.0470	.0920		
180.000		-.0340	-.0400	.0320						

MACH (2) = 2.999 BETAT (3) = .60

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7400	.9190	.3760	.0110	.0130	.2230			.1180		.0560	.1310	.1430	.1080	.0230
20.000			.4010	.0160	.0120	.1740			.1430		.0430				
40.000			.4830	.0150	.0060	.1090			.1400		.1550	.0740	.0750	.0350	.0090
55.000			.5190	.0440	.0440	.0730			.0840		.1350				
70.000			.5460	.1000	.0540	.0640			.0750		.1210	.0350	.0400	.0230	.0210
90.000		1.1840	.5790	.1390	.0710	.0760			.0770		.0640	-.0190	-.0110	.0250	.0080
120.000			.6220	.2200	.1650	.1310			.1840		.0810	-.0320	-.0390	-.0320	.0...
142.000										.0810					
150.000			.6400	.2580	.2490	.2880			.7640		.0190	-.0270	-.0320	-.0230	-.0070
157.000								1.0180							
162.000									.9250						
165.000											-.0190	-.0400	-.0240	-.0110	-.0150
169.000									.9450						
172.000							1.0860								

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AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RD-B18)

MACH (2) = 2.999 BETAT (3) = .0U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.7400	1.3090	.5880	.2990	.2060	.3400			1.2470		-.0390	-.0210	-.0150	-.0090	-.0140
X/LB	.5875	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0190							-.1350		-.0970					
4U.000	.0190	.0030		.0680	.0150	-.0700	-.0720			-.1160					
7U.000		-.0210	-.0440	-.0470	-.0210	-.0510	-.0630	-.0210							
9U.000		-.0050	-.0290	-.0190	-.0030	-.0110	-.0260	-.0020							
115.000				.0560	.0260	-.0230	-.0280	-.0080	.0520						
110.000									.0170						
120.000		.0280	.0010	.2080	.1290	-.0580	-.0650	.0080							
130.000				.3580	.3650	-.0390	-.0420	.0180							
150.000		.0240	.0080	.1440	.2890	-.0030	.0310	.0880							
165.000		.0060		.1430	.2410	.1610	.1370	.0740							
180.000		.0060	.0150	.0220											

MACH (2) = 2.999 BETAT (4) = 4.3U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.7210	.9130	.3890	.0240	.0120	.0780			.1170		.0620	.0640	.0770	.0450	.0130
2U.000			.3690	.0480	.0040	.0520			.0910		.0220				
4U.000			.4160	.0130	-.0240	.0250			.0540		.0360	.1000	.0870	.0210	-.0190
55.000			.4180	.0130	-.0350	.0230			.0260		.0680				
7U.000			.4190	.0360	-.0220	.0250			.0180		.0450	-.0240	-.0300	.0020	.0020
90.000		1.0290	.4450	.0620	.0110	.0230			.0480		-.0490	-.0640	-.0680	-.0300	.0000
120.000			.5050	.1490	.1060	.1040			.1120		.0220	-.0670	-.0740	-.0720	-.0170
142.000										.0360					
150.000			.3660	.2150	.2050	.2420		.9120	.6360		-.0490	-.0630	-.0550	-.0410	-.0370
157.000									.6860						
162.000											-.0540	-.0580	-.0330	-.0230	-.0380
165.000									.9330						
169.000							1.0440								
172.000									1.2200		-.0390	-.0300	-.0190	-.0160	-.0220
180.000	1.7210	1.2070	.5720	.2890	.2770	.3340									
X/LB	.5875	.6628	.7390	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0130							-.1450		-.0980					
4U.000	-.0340	-.0240		-.0070	-.0300	-.1040	-.1360			-.0960					

AMES 87-707 IA9 CEA + 83 + T9 ORBITER FUSELAGE (RBNB18)

MACH (2) = 2.999 BETAT (4) = 4.390

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0275	-.0450	-.0420	-.0270	-.0540	-.0710	-.0340		
90.000		-.0050	-.0210	.0020	.0130	-.0420	-.0610	-.0260		
105.000				.0450	.0070	-.0410	-.0630	-.0290		
110.000									.0350	
120.000		.0020	-.0030	.1100	.0800	-.0960	-.0980	-.0330	-.0190	
135.000				.5680	.3650	-.0550	-.0610	-.0070		
150.000		-.0140	-.0450	.1220	.5040	.0110	.0100	.0450		
165.000		-.0480		.0450	.2860	.1110	.0320	.0490		
180.000		-.0380	-.0440	.0270						

MACH (2) = 2.999 BETAT (5) = 8.720

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6720	.9170	.3720	.0690	.0120	.0950			.1920		.1000	.0670	.0700	.0140	.0000
25.000			.3450	-.0040	.0150	.0730			.1130		.0620				
40.000			.3490	-.0080	-.0110	.0320			.0420		-.0150	-.0210	-.0380	-.0650	-.0710
55.000			.3380	-.0080	-.0270	.0120			.0270		.0480				
70.000			.3210	-.0090	-.0350	-.0420			.0070		.0400	-.0290	-.0540	-.0330	-.0260
90.000		.8980	.3380	.0100	-.0290	-.0460			-.0310		-.0530	-.0690	-.0690	-.0780	-.0300
120.000			.4130	.0990	.0610	.0550			.0450		-.0290	-.0930	-.1120	-.0950	-.0680
142.000										-.1050					
150.000			.4940	.1800	.1720	.1960			.0270		-.0350	-.0830	-.0720	-.0540	-.0420
157.000								.0180							
162.000									.0540						
165.000											-.0850	-.0640	-.0480	-.0610	-.0770
180.000									.0150						
172.000							.9160								
180.000	1.6720	1.2810	.5990	.2740	.2090	.3360			1.1840		-.0280	-.0320	-.0320	-.0520	-.0740

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0380							-.1120		-.1020
40.000	-.0670	-.0470		-.0310	-.0790	-.1050	-.1930			-.0950
75.000		-.0250	-.0430	-.0380	-.0380	-.0480	-.0290	-.0450		
90.000		-.0180	-.0310	-.0280	.0020	-.0480	-.0290	-.0450		
105.000				.0350	.0000	-.0270	-.0440	-.0450		
110.000									-.0410	
120.000		-.0250	-.0290	.1170	.0000	-.0740	-.0750	-.0640	-.0540	
135.000				.2940	.3050	-.0370	-.0520	-.0530		
150.000		-.0870	-.0850	-.0280	.0250	.1180	-.0140	-.0270		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB18)

MACH (2) = 2.999 BETAT (5) = 8.720

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0890		-.0650	.0670	-.0070	-.0330	-.0690		
180.000		-.1080	-.0900	-.0630						

MACH (3) = 3.502 BETAT (1) = -8.730

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8230	.9510	.4040	.0360	.0100	.0960			.1870		.1290	.0840	.0720	.0430	.0210
20.000			.4870	.0640	.0080	.0940			.1390		.1750				
40.000			.6770	.0840	.0940	.1780			.1180		.2470	.1440	.0760	.0490	.0540
55.000			.7870	.1680	.1910	.1740			.2310		.4050				
70.000			.8690	.2750	.2150	.2620			.2180		.2850	.2340	.1410	.1210	.0980
90.000		1.5640	.9160	.3400	.2370	.2350			.2190		.2510	.1120	.1420	.1090	.0810
125.000			.8890	.3860	.3170	.3470			.4630		.2340	.0790	.0460	.0780	.0580
142.000										.2380					
150.000			.8010	.3490	.3220	.3940			1.0610		.0960	.0640	.0450	.0320	.0330
157.000								1.2080							
162.000									1.1620						
165.000											.0650	.0470	.0450	.0320	.0440
169.000									1.0690						
172.000							1.0690								
180.000	1.8230	1.3510	.6070	.3050	.2780	.3280			1.3330		.0420	-.0140	-.0140	-.0410	-.0530

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0690							-.1360		-.0830
40.000	.0440	.0480		.2190	.1890	.0560	.0180			-.0490
70.000		.0330	-.0040	.0010	.0340	.0140	-.0040	.0450		
90.000		.0490	.0190	.0210	.0670	.0510	.0570	.0960		
105.000				.1140	.1180	.0770	.0770	.0930		
110.000									.0830	
120.000		.0330	.0220	.3660	.2940	.0450	.0450	.1150	.1020	
135.000				.3560	.3900	-.0170	-.0340	.0280		
150.000		.0300	.0260	.1560	.1650	-.0680	-.0520	.0420		
165.000		.0410		.1030	.1790	.0650	.1210	.0930		
180.000		-.0770	-.0670	-.0580						

AMES 87-757 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB18)

MACH (3) = 3.502 BETAT (2) = -6.530

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8480	.9540	.3970	.0370	.0270	.0930			.1530		.0810	.0980	.0780	.0470	.0150
20.000			.4840	.0550	.0130	.0870			.1280		.1680				
40.000			.6320	.0530	.0710	.1540			.1040		.2460	.1290	.0750	.0470	.0350
55.000			.7270	.1170	.1500	.1420			.1840		.2470				
70.000			.7960	.2390	.1750	.1610			.1720		.2130	.1760	.1210	.0950	.0790
90.000		1.4980	.8430	.2930	.1940	.1930			.1710		.1950	.0770	.0910	.0930	.0650
125.000			.8350	.3510	.2890	.3000			.3910		.1990	.0540	.0230	.0520	.0470
142.000										.2000					
150.000			.7740	.3350	.3080	.3690			.9960		.0760	.0480	.0260	.0140	.0180
157.000								1.1870							
162.000									1.1180						
165.000											.0500	.0260	.0290	.0150	.0180
169.000									1.0630						
172.000							1.1080								
180.000	1.8480	1.3780	.6180	.3110	.2820	.3330			1.3620		.0420	-.0150	-.0150	-.0180	-.0370

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0150							-.1210		-.0640
40.000	.0280	.0190		.1720	.1400	.0330	.0020			-.0640
70.000		.0160	-.0190	-.0170	.0070	-.0050	-.0170	.0190		
90.000		.0280	.0010	.0480	.0480	.0310	.0310	.0640		
105.000				.0830	.0800	.0430	.0420	.0640		
115.000									.0640	
125.000		.0220	.0150	.3260	.2430	.0240	.0040	.0810	.0710	
135.000				.3640	.3650	-.0170	-.0320	.0180		
150.000		.0180	.0150	.0950	.1740	-.0540	-.0370	.0270		
165.000		.0280		.0800	.1750	.0930	.1290	.0940		
180.000		-.0530	-.0470	-.0280						

MACH (3) = 3.502 BETAT (3) = -4.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8820	.9530	.3890	.0390	.0280	.0880			.1400		.0620	.0840	.0870	.0520	.0360
20.000			.4440	.0480	.0280	.0870			.1340		.1110				
40.000			.5880	.0470	.0590	.1120			.0980		.2640	.1250	.0730	.0480	.0280
55.000			.6660	.0890	.1150	.1190			.1530		.1730				
70.000			.7270	.1840	.1400	.1250			.1370		.1730	.0830	.1010	.0750	.0620
90.000		1.4270	.7730	.2490	.1590	.1600			.1360		.1540	.0470	.0290	.0770	.0510
125.000			.7830	.3140	.2590	.2590			.3310		.1630	.0330	.0480	.0160	.0320

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AMES 67-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE

MACH (3) = 3.502 BETAT (3) = -4.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI										.1720					
142.000									.9350		.0650	.0330	.0110	.0010	.0110
150.000			.7500	.3140	.2930	.3450		1.1480							
157.000									1.0870		.0370	.0080	.0150	.0020	-.0030
162.000															
165.000									1.0610						
169.000							1.1180								
172.000									1.3780		.0000	-.0110	-.0110	-.0030	-.0220
180.000	1.8620	1.3900	.6250	.3140	.2870	.3360									
X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI								-.1180		-.0780					
.000	.0030									-.0730					
40.000	.0190	.0050		.1290	.1110	-.0010	-.0390	.0020							
70.000		.0070	-.0240	-.1240	-.0080	-.0280	-.0430	.0410							
90.000		.0190	-.0070	-.0070	.0210	.0020	.0020	.0420							
105.000				.0650	.0560	.0160	.0090		.0540						
115.000									.0520						
120.000		.0150	.0060	.3210	.2160	-.0040	-.0240	.0440							
135.000				.3890	.3570	-.0250	-.0390	.0150							
150.000		.0160	.0130	.0980	.1940	-.0500	-.0380	.0330							
165.000		.0220		.0730	.1920	.1150	.1380	.1120							
180.000		-.0140	-.0250	.0270											

MACH (3) = 3.502 BETAT (4) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI									.1360		.0560	.0710	.1410	.0750	.0490
.100	1.8840	.9480	.3870	.0320	.0190	.0900			.1560		.0540				
20.000			.4080	.0310	.0120	.0780			.1130		.0640	.1050	.0750	.0550	.0390
40.000			.4990	.0290	.0120	.0720			.0810		.0830				
55.000			.5530	.0380	.0540	.0600			.0650		.0910	.0290	.0070	.0390	.0330
70.000			.5850	.0950	.0710	.0660			.0680		.0720	-.0070	-.0190	.0140	.0220
90.000		1.2750	.6250	.1610	.0910	.0890			.1970		.0970	-.0080	-.0230	-.0230	.0050
125.000			.6620	.2410	.1820	.1680				.1190					
142.000									.8030		.0410	-.0040	-.0170	-.0180	-.0210
150.000			.6780	.2770	.2540	.2870		1.1030							
157.000									1.0110		.0060	-.0180	-.0140	-.0090	-.0190
162.000															
165.000									1.0350						
169.000							1.1850								
172.000															

AMES 87-757 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB18)

MACH (3) = 3.502 BETAT (4) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.8640	1.3980	.6190	.3130	.2850	.3340			1.3570		-.0140	-.0070	-.0040	-.0010	-.0100
X/LB	.5873	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	.0150							-.1110		-.0740					
40.000	.0030	.0180		.0670	.0190	-.0630	-.0750			-.0860					
70.000		-.0140	-.0380	-.0350	-.0230	-.0560	-.0760	-.0200							
90.000		.0010	-.0230	-.0220	.0010	-.0260	-.0340	.0040							
105.000				.0560	.0410	-.0310	-.0460	.0010							
120.000									.0550						
125.000		.0050	.0040	.2260	.1360	-.0450	-.0560	-.0050	.0100						
135.000				.2770	.3510	-.0330	-.0540	.0100							
150.000		.0080	.0100	.1230	.2300	-.0120	.0040	.0690							
165.000		.0050		.1310	.1930	.1190	.0910	.0650							
180.000		-.0070	.0050	.0170											

MACH (3) = 3.502 BETAT (5) = 4.470

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8450	.9480	.3880	.0370	.0320	.0880			.1340		.0590	.0990	.0940	.0560	.0280
20.000			.3770	.1270	.1270	.0650			.1190		.0370				
40.000			.4190	.0240	.0060	.0570			.0540		.0400	.0180	.0630	.0430	.0020
55.000			.4540	.0240	.0130	.0400			.0470		.0460				
75.000			.4590	.0380	.0230	.0390			.0140		.0390	-.0490	-.0310	.0010	.0130
90.000		1.1130	.4870	.0950	.0370	.0410			.0240		.0050	-.0420	-.0490	-.0430	-.0070
125.000			.5500	.1740	.1230	.1250			.1190		.0440	-.0380	-.0470	-.0530	-.0400
142.000										.0710					
150.000			.6030	.2420	.2130	.2600			.6670		.0210	-.0330	-.0340	-.0330	-.0310
157.000								1.0160							
168.000									.9020						
185.000											-.0250	-.0330	-.0220	-.0140	-.0270
189.000									1.0320						
172.000							1.0750								
180.000	1.8450	1.3920	.6170	.3080	.2810	.3290			1.3440		-.0110	-.0080	-.0110	-.0050	-.0250
X/LB	.5873	.6626	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.1080							-.1040		-.0780					
000	-.0230	-.0100		.0080	-.0250	-.0570	-.0640			-.0890					

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB18)

MACH (3) = 3.502 BETAT (5) = 4.470

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0200	-.0410	-.0380	-.0300	-.0320	-.0490	-.0270		
90.000		-.0050	-.0180	-.0100	.0120	-.0200	-.0390	-.0170		
105.000				.0430	.0120	-.0260	-.0410	-.0170		
110.000									.0670	
120.000		.0610	.0000	.0900	.0570	-.0580	-.0590	-.0260	-.0180	
135.000				.5330	.3390	-.0220	-.0330	.0010		
150.000		-.0210	-.0120	.0970	.4320	.0310	.0120	.0370		
165.000		-.0320		.0160	.2220	.1040	.0310	.0390		
180.000		-.0180	-.0250	.0230						

MACH (3) = 3.502 BETAT (6) = 6.670

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0642	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.8210	.9450	.3900	.0380	.0180	.0870			.1570		.0770	.0980	.0740	.0440	.0130
20.000			.3670	.0220	.0040	.0740			.1080		.0360				
40.000			.3950	.0210	-.0100	.0440			.0360		.0110	.0020	.0170	-.0040	-.0240
55.000			.4050	.0240	-.0050	.0190			.0270		.0340				
70.000			.3990	.0200	.0000	.0190			-.0030		.0130	-.0250	-.0410	-.0180	.0020
90.000		1.0320	.4240	.0640	.0130	.0190			-.0080		-.0270	-.0390	-.0590	-.0580	-.0280
120.000			.4900	.1350	.0950	.0950			.0680		.0190	-.0510	-.0840	-.0660	-.0360
142.000										.0440					
150.000			.5620	.2030	.1930	.2350			.0440		.0070	-.0440	-.0450	-.0390	-.0300
157.000								.9460							
162.000									.0620						
165.000											-.0420	-.0380	-.0270	-.0240	-.0470
169.000									1.0160						
172.000							1.0020								
180.000	1.8210	1.3740	.8070	.2850	.2780	.3180			1.3260		-.0060	-.0150	-.0190	-.0130	-.0400

X/LB	.5973	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0170							-.1270		-.0670
40.000	-.0470	-.0300		-.0150	-.0360	-.0930	-.1240			-.0670
75.000		-.0290	-.0460	-.0380	-.0360	-.0470	-.0760	-.0270		
90.000		-.0080	-.0200	-.0140	.0100	-.0500	-.0780	-.0250		
105.000				.0270	.0000	-.0600	-.0760	-.0300		
110.000									.0120	
120.000		-.0180	-.0100	.0870	-.0020	-.0940	-.0760	-.0395	-.0280	
135.000				.3520	.3030	-.0570	-.0640	-.0150		
150.000		-.0340	.0420	.0380	.1610	.0150	-.0020	.0210		

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-757 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB18)

MACH (3) = 3.502 BETAT (6) = 6.670

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0480		.0060	.0940	.0080	-.0330	-.0180		
180.000		-.0580	-.0490	-.0290						

MACH (3) = 3.502 BETAT (7) = 8.870

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3260	.3953	.5125
PHI															
.000	1.7930	.9420	.3910	.0410	.0090	.0900			.1780		.1240	.0760	.0580	.0450	.0140
20.000			.3550	.0240	-.0070	.0690			.1180		.0500				
40.000			.3650	.0240	-.0230	.0370			.0520		-.0110	-.0170	-.0390	-.0520	-.0530
55.000			.3630	.0230	-.0190	.0020			.0140		.0310				
70.000			.3470	.0170	-.0150	.0040			-.0130		-.0130	-.0350	-.0490	-.0320	-.0110
90.000		.9560	.3690	.0380	-.0050	.0010			-.0250		-.0490	-.0680	-.0690	-.0690	-.0420
125.000			.4420	.1150	.0770	.0680			.0620		-.0440	-.0620	-.0730	-.0760	-.0680
142.000										.0280					
150.000			.5230	.1960	.1790	.2100			.5380		-.0440	-.0560	-.0520	-.0430	-.0370
157.000								.8610							
162.000									.9450						
165.000											-.0520	-.0440	-.0350	-.0330	-.0630
169.000									.9930						
172.000							.9230								
180.000	1.7930	1.3540	.5950	.2940	.2720	.3040			1.2990		-.0620	-.0160	-.0240	-.0470	-.0620

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	.0000							-.1290		-.0870
40.000	-.0580	-.0510		-.0180	-.0340	-.1110	-.1290			-.0720
70.000		-.0310	-.0450	-.0340	-.0350	-.0330	-.0650	-.0230		
90.000		-.0250	-.0330	-.0300	-.0030	-.0540	-.0660	-.0360		
105.000				.0120	-.0070	-.0570	-.0650	-.0370		
110.000									.0100	
120.000		-.0290	-.0280	.0830	-.0060	-.0890	-.0910	-.0450	-.0350	
135.000				.1770	.2020	-.0870	-.0980	-.0540		
150.000		-.0630	-.0660	-.0310	.0200	-.0280	-.0550	-.0220		
165.000		-.0660		-.0380	.0430	-.0290	-.0690	-.0500		
180.000		-.0820	-.0720	-.0590						

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB19) (10 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

ALPHAT = .00 ORBINC = .50
RUDDER = -10.00 ELEVON = .00
RUDFLR = .00

MACH (1) = 2.499 BETAT (1) = -8.43

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.00	1.4380	.9200	.4740	.0430	.0980	.2650			.1170		.0520	.0380	.0140	-.0290	-.0460
20.00			.5280	.0900	.1190	.2400			.1550		.0630				
40.00			.6630	.1800	.1570	.2270			.2070		.1010	.0410	.0140	.0050	.0490
55.00			.7210	.1790	.2120	.4390			.3460		.2620				
70.00			.7480	.2430	.2030	.4060			.4040		.3230	.1220	.0320	.0350	.0370
90.00		1.2540	.7410	.2580	.2020	.2940			.4080		.3720	.1120	.0360	.0210	.0160
125.00			.6950	.2780	.2480	.3170			.4710		.2860	.0720	.0180	-.0030	-.0060
142.00										.1510					
150.00			.6130	.2320	.2410	.3210			.8510		.1270	.0320	.0210	.0120	-.0190
157.00								.9720							
162.00									.8870						
165.00											-.0330	.0260	.0510	.0230	-.0160
169.00									.7240						
172.00							.8980								
180.00	1.4380	1.0300	.4370	.1950	.1930	.2750			.9190		-.0910	-.0880	-.0580	-.1210	-.1470

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.00	-.0210							-.1810		-.1230
40.00	.1150	.0820		.2460	.1700	.0910	-.0530			-.1220
70.00		-.0150	-.0230	-.0140	.0180	.0430	-.0270	.0070		
90.00		.0000	-.0110	.0210	.1510	.0370	.0120	.0270		
105.00				.1340	.1650	.0880	.0000	.0150		
110.00									.0540	
120.00		-.0150	-.0280	.3900	.3380	.0470	.0030	.0290	.0240	
135.00				.2520	.2740	-.0570	-.0960	-.0450		
150.00		-.0320	-.0370	.0390	.0590	-.1370	-.0880	-.0680		
165.00		-.0280		.0680	.1340	.0360	.1110	.0480		
180.00		-.1390	-.1150	-.0490						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (1) = 2.499 BETAT (2) = -6.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.4480	.9190	.4590	.0350	.0820	.1080			.1390		.0650	.0840	.0370	-.0230	-.0530
25.000			.5110	.0750	.0990	.2200			.1670		.0640				
40.000			.6230	.1440	.1290	.1930			.2060		.0940	.0390	.0040	-.0050	.0170
55.000			.6610	.1490	.1700	.3870			.3110		.2290				
70.000			.6810	.1930	.1580	.2200			.3720		.2920	.1120	.0170	.0150	.0490
90.000		1.1970	.6810	.2080	.1550	.2260			.3290		.3350	.0970	.0250	-.0130	-.0050
120.000			.6500	.2410	.2110	.2630			.3790		.2410	.0520	.0030	-.0110	-.0210
142.000										.1560					
150.000			.5870	.2130	.2230	.2990			.7980		.0080	-.0040	-.0020	-.0010	-.0260
157.000								.9390							
162.000									.8030						
165.000											-.0490	-.0210	.0190	.0090	-.0240
169.000									.7250						
172.000							.8870								
180.000	1.4480	1.0390	.4410	.1940	.1930	.2790			.9390		-.0910	-.0930	-.0780	-.0960	-.1160

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0380							-.1440		-.1030
40.000	.0910	.0730		.2010	.1250	.0720	-.0470			-.1370
70.000		-.0350	-.0490	-.0390	-.0010	.0020	-.0240	-.0480		
90.000		-.0170	-.0390	.0020	.0700	.0390	.0130	.0080		
105.000				.0920	.1260	.0780	.0120	-.0030		
110.000									.0630	
120.000		-.0290	-.0360	.3040	.2560	.0630	.0150	.0180	.0040	
135.000				.2530	.2730	-.0170	-.0610	-.0340		
150.000		-.0350	-.0410	.0470	.0850	-.1220	-.0430	.0220		
165.000		-.0330		.0620	.1420	.0840	.1160	.0330		
180.000		-.0930	-.0780	-.0250						

MACH (1) = 2.499 BETAT (3) = -4.180

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.4590	.9040	.4430	.0180	.0380	.0210			.1380		.0580	.0990	.0660	.0110	-.0610
25.000			.4810	.0440	.0590	.0240			.1780		.0740				
40.000			.5780	.1130	.0800	.0690			.2220		.0880	.0380	.0090	-.0160	-.0420
55.000			.6020	.1490	.1180	.2020			.2790		.2050				
70.000			.6150	.1490	.1190	.1770			.2510		.2710	.0810	-.0010	-.0080	-.0140
90.000		1.1390	.6170	.1630	.1070	.1760			.2190		.2880	.0780	.0080	-.0190	-.0280
110.000			.6000	.2060	.1690	.2140			.3030		.1360	.0230	-.0080	-.0230	-.0380

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-757 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (1) = 2.499 BETAT (3) = -4.18

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI										.0670					
142.000									.7510		-.0100	-.0430	-.0310	-.0190	-.0330
150.000			.5640	.1950	.2050	.2690		.9040							
157.000									.7700						
162.000											-.0660	-.0590	-.0370	-.0010	-.0290
165.000									.7250						
169.000							.8830								
172.000									.9560		-.1010	-.0970	-.0700	-.0500	-.0870
180.000	1.4590	1.0510	.4400	.1940	.1950	.2690									

X/LB	.5873	.5626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0740							-.1550		-.0960
40.000	.0490	.0370		.1440	.0770	.0690	-.0870			-.1480
70.000		-.0560	-.0670	-.0600	-.0180	-.0390	-.0590	-.0250		
90.000		-.0410	-.0570	-.0060	.0360	-.0040	-.0270	-.0110		
105.000				.0590	.0790	.0280	-.0270	-.0180		
110.000									.0630	
120.000		-.0420	-.0480	.2140	.1980	.0270	-.0230	.0060	-.0080	
135.000				.2750	.2720	-.0720	-.0720	-.0200		
150.000		-.0430	-.0410	.0650	.1360	-.0970	-.0340	.0540		
165.000		-.0420		.0720	.1700	.0540	.0860	.0220		
180.000		-.0670	-.0540	-.0390						

MACH (1) = 2.499 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4730	.8540	.3710	.0020	.0280	.1620			.1120		.1720	.1530	.0890	.0060	-.0630
20.000			.3800	-.0010	.0310	.1260			.1260		.1130				
40.000			.4470	.0230	.0350	.0230			.2320		.0900	.0550	.0590	-.0110	-.0580
55.000			.4700	.0320	.0320	.1140			.1400		.1690				
70.000			.4640	.0490	.0200	.0790			.0930		.2230	.0580	-.0270	-.0320	-.0390
90.000		1.0150	.4780	.0700	.0250	.0800			.0850		.1350	.0490	-.0130	-.0410	-.0470
120.000			.4950	.1360	.1020	.0930			.1530		.0460	-.0730	-.0260	-.0400	-.0410
142.000										.0010					
150.000			.5020	.1620	.1720	.2220			.6370		-.0460	-.0880	-.0850	-.0300	-.0270
157.000								.8400							
162.000									.7060						
165.000											-.0950	-.1020	-.0780	-.0490	-.0190
169.000									.7230						
172.000							.9000								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (1) = 2.499 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.4730	1.0680	.4490	.1990	.1990	.2640			.9610		-.1090	-.0860	-.0820	-.0560	-.0080

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0950							-.1080		-.0820
40.000	-.0090	-.0090		.0410	-.0010	-.0280	-.1050			-.1090
70.000		-.0750	-.0760	-.0710	-.0270	-.0340	-.0550	-.0570		
90.000		-.0540	-.0630	-.0130	-.0140	-.0110	-.0320	-.0410		
105.000				.0170	.0060	-.0110	-.0300	-.0490		
110.000									-.0260	
120.000		-.0360	-.0410	.1480	.1180	-.0100	-.0330	-.0190	-.0240	
135.000				.3760	.2900	-.0100	-.0370	.0160		
150.000		-.0240	-.0260	.1180	.2340	-.0080	.0260	.0440		
165.000		-.0220		.1100	.2180	.1490	.1100	.0030		
180.000		-.0180	-.0200	-.0210						

MACH (1) = 2.499 BETAT (5) = 4.30

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4560	.8930	.4240	.0630	.0470	.0370			.1320		.0950	.1120	.0790	.0080	-.0580
20.000			.3990	.0400	.0380	.0530			.1120		.1090				
40.000			.4090	.0050	.0090	.0010			.1230		.1160	.0570	.0270	-.0420	-.0840
55.000			.3890	.0020	-.0010	.0050			.0400		.1480				
70.000			.3590	.0030	-.0180	.0180			.0280		.1220	.0200	-.0320	-.0450	-.0560
90.000		.8810	.3560	.0010	-.0270	.0050			.0600		.0230	-.0380	-.0320	-.0500	-.0560
120.000			.3900	.0720	.0420	.0610			.0710		-.0190	-.1130	-.1020	-.0510	-.0300
142.000										-.0420					
150.000			.4320	.1270	.1290	.1800			.5250		-.0770	-.1210	-.1040	-.0810	-.0190
157.000								.7810							
162.000									.6670						
165.000											-.1210	-.1160	-.0900	-.0710	-.0420
169.000									.7200						
172.000							.8830								
180.000	1.4580	1.0550	.4340	.1930	.1910	.2550			.9440		-.1020	-.0900	-.0760	-.0550	-.0840

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0710							-.1270		-.1060
.000	-.0370	-.0320		-.0330	-.0650	-.1030	-.1520			-.0870

AMES 67-7\7 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (1) = 2.499 BETAT (5) = 4.3\0

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0475	-.0795	-.0755	-.0555	-.0635	-.0795	-.0695		
95.000		-.0355	-.0645	-.0225	-.0315	-.0435	-.0795	-.0635		
115.000				.0065	-.0245	-.0455	-.0895	-.0695		
115.000									-.0385	
125.000		-.0375	-.0475	.0775	.0355	-.0975	-.0785	-.0535	-.0435	
135.000				.4815	.2925	-.0975	-.0625	-.0385		
155.000		-.0295	-.0305	.1475	.3185	.0275	.0045	-.0015		
165.000		-.0395		-.0155	.2575	.1345	.0525	.0075		
185.000		-.0685	-.0535	-.0385						

MACH (1) = 2.499 BETAT (6) = 6.43\

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.4415	.8855	.4175	.0085	.0345	.2395			.1195		.0455	.0865	.0195	-.0085	-.0575
25.000			.3935	.0055	.0265	.2015			.1075		.0835				
45.000			.3885	.0045	.0055	-.0095			.0915		.0275	.0485	-.0155	-.0685	-.0955
55.000			.3515	.0025	-.0195	-.0085			.0295		.0815				
75.000			.3175	-.0025	-.0275	.0065			.0245		.0595	.0095	-.0345	-.0595	-.0885
95.000		.8245	.3115	-.0225	-.0325	-.0095			.0325		.0085	-.0755	-.0445	-.0555	-.0625
125.000			.3535	.0475	.0245	.0295			.0345		-.0455	-.1265	-.1255	-.0675	-.0315
142.000										-.0605					
155.000			.4055	.1125	.1175	.1635			.0795		-.0895	-.1315	-.1155	-.0895	-.0325
157.000								.7495							
162.000									.0585						
165.000											-.1335	-.1255	-.0965	-.0855	-.0985
169.000									.0715						
172.000							.8395								
185.000	1.4415	1.0515	.4335	.1915	.1935	.2535			.0935		-.1005	-.1005	-.0735	-.0725	-.1225

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0395							-.1405		-.1115
45.000	-.0485	-.0185		-.0625	-.0945	-.1195	-.1355			-.1045
75.000		-.0595	-.0765	-.0785	-.0635	-.0695	-.0955	-.0785		
95.000		-.0495	-.0615	-.0325	-.0385	-.0545	-.0915	-.0745		
105.000				-.0115	-.0515	-.0535	-.0925	-.0815		
115.000									-.0485	
125.000		-.0465	-.0535	.1215	.0185	-.1115	-.1055	-.0885	-.0755	
135.000				.4995	.3035	-.0675	-.0915	-.0695		
155.000		-.0475	-.0545	.0795	.3005	.0175	-.0575	-.0215		

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (1) = 2.499 BETAT (6) = 6.430

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0780		-.0260	.2220	.0940	.0140	-.0380		
180.000		-.0960	-.0800	-.0220						

MACH (1) = 2.498 BETAT (7) = 8.550

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4230	.8670	.3980	.0110	.0320	.2920			.1020		.0290	.0600	.0000	-.0440	-.0550
20.000			.3720	.0030	.0150	.2050			.0720		.0280				
40.000			.3530	-.0130	-.0090	-.0200			.0290		-.0410	-.0400	-.0670	-.0940	-.1160
55.000			.3210	-.0210	-.0350	-.0150			.0180		.0410				
70.000			.2700	-.0210	-.0440	-.0220			.0120		.0510	-.0370	-.0410	-.0680	-.0730
90.000		.7660	.2580	-.0490	-.0450	-.0190			-.0040		-.0120	-.0850	-.0730	-.0630	-.0660
120.000			.3080	.0230	.0000	.0060			.0630		-.0790	-.1450	-.1400	-.0790	-.0360
142.000										-.0780					
150.000			.3710	.1000	.1010	.1220			.0140		-.1050	-.1420	-.1240	-.0890	-.0870
157.000								.6620							
162.000									.6410						
165.000											-.1520	-.1280	-.1040	-.1190	-.1400
169.000									.7090						
172.000							.7610								
180.000	1.4230	1.0430	.4290	.1830	.1920	.2620			.9140		-.0940	-.0990	-.0760	-.1320	-.1530

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0270							-.1560		-.1160
40.000	-.0790	-.0340		-.1170	-.0930	-.1530	-.1480			-.1090
70.000		-.0550	-.0800	-.0840	-.0680	-.0690	-.1010	-.0830		
90.000		-.0450	-.0600	-.0430	-.0450	-.0630	-.1010	-.0820		
105.000				-.0040	-.0560	-.0610	-.1000	-.0870		
110.000									-.0600	
120.000		-.0570	-.0550	.1410	.0110	-.1290	-.1240	-.0960	-.0890	
135.000				.4930	.3330	-.0840	-.1010	-.0800		
150.000		-.1210	-.1300	-.0750	-.0070	-.0840	-.0620	-.0590		
165.000		-.1260		-.0590	.1360	-.0090	-.0670	-.0940		
180.000		-.1320	-.1190	-.0480						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (2) = 2.999 BETAT (1) = -8.580

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5070	.8390	.3760	.0350	.0310	.0570			.1870		.0770	.0450	.0650	.0000	-.0090
20.000			.4480	.0610	.0360	.0770			.2560		.0950				
40.000			.6090	.1090	.0950	.2070			.2260		.1650	.1020	.0290	.0270	.0130
55.000			.6930	.1450	.1670	.2230			.4110		.2990				
70.000			.7450	.2380	.1760	.2200			.2420		.3850	.1730	.0770	.0610	.0470
90.000		1.3050	.7660	.2680	.1850	.2070			.2400		.3530	.1630	.0820	.0510	.0280
120.000			.7080	.2880	.2360	.2740			.3860		.1830	.0590	.0560	.0220	.0090
142.000										.1610					
150.000			.6190	.2430	.2310	.2930			.8290		.0370	.0190	.0110	.0240	.0080
157.000								.9530							
162.000									.8720						
165.000											.0670	.0110	.0140	.0380	.0200
169.000									.7810						
172.000							.8580								
180.000	1.5070	1.0720	.4530	.2070	.1880	.2470			.9860		-.0470	-.0540	-.0480	-.0770	-.1000

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0430							-.1320		-.0950
40.000	.0440	.0870		.2250	.1880	.0920	.0160			-.0800
70.000		-.0060	-.0360	-.0270	.0020	.0060	.0160	.0130		
90.000		.0070	-.0150	-.0110	.0690	.0370	.0380	.0570		
105.000				.0860	.0980	.0980	.0430	.0480		
110.000									.0840	
120.000		-.0040	-.0110	.3430	.2440	.0570	.0360	.0640	.0480	
135.000				.2540	.2820	-.0560	-.0610	-.0080		
150.000		-.0060	-.0180	.0380	.0720	-.1120	-.0790	.0050		
165.000		-.0050		.0460	.1170	.0150	.0970	.0470		
180.000		-.1090	-.0980	-.0710						

MACH (2) = 2.999 BETAT (2) = -4.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5490	.8400	.4090	.0420	.0170	.0240			.1100		.0820	.0860	.0520	.0480	-.0080
20.000			.4440	.0660	.0210	.0200			.1480		.1000				
40.000			.5290	.0660	.0750	.1240			.0990		.1490	.0800	.0330	.0090	.0080
55.000			.5830	.0880	.1080	.1370			.1590		.2460				
70.000			.6180	.1430	.1520	.1260			.1450		.2460	.1370	.0470	.0270	.0090
90.000		1.1960	.6400	.1830	.1120	.1340			.1200		.1510	.0950	.0560	.0200	-.0010
120.000			.6230	.2240	.1780	.1960			.2710		.1180	-.0040	-.0130	.0170	-.0110

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (2) = 2.999 BETAT (2) = -4.260

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0980					
150.000			.5790	.2240	.2560	.2530			.7360		.0130	-.0160	-.0290	-.0130	-.0090
157.000								.9020							
162.000									.8140						
165.000											-.0180	-.0350	-.0230	-.0240	-.0020
169.000									.7830						
172.000							.8730								
180.000	1.5490	1.1480	.4650	.2130	.1970	.2400			1.0260		-.0330	-.0550	-.0470	-.0460	-.0440

X/LB	.5073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0360							-.1180		-.0770
40.000	-.0020	.0480		.1330	.0980	.0190	-.0350			-.0990
70.000		-.0350	-.0620	-.0610	-.0290	-.0390	-.0330	-.0240		
90.000		-.0240	-.0460	-.0330	-.0040	-.0130	-.0180	.0040		
109.000				.0250	.0240	.0210	-.0040	.0050		
115.000									-.0610	
120.000		-.0240	-.0340	.1990	.1510	-.0270	-.0160	.0220	.0170	
135.000				.2440	.2560	-.0610	-.0720	-.0220		
150.000		-.0240	-.0280	.0480	.0160	-.0820	-.0580	.0120		
165.000		-.0180		.0520	.0250	.0670	.0740	.0380		
180.000		-.0640	-.0580	-.0030						

MACH (2) = 2.999 BETAT (3) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5080	.8450	.3400	.0070	.0140	.0300			.0930		.0650	.1350	.1220	.0740	-.0040
20.000			.3620	.0690	.0120	.0160			.1190		.0630				
40.000			.4420	.0070	.0120	.0770			.0590		.1370	.0590	.0480	.0280	-.0130
55.000			.4780	.0180	.0290	.0550			.1120		.1370				
70.000			.4910	.0580	.0330	.0600			.0690		.0990	.0620	.0190	-.0020	-.0130
90.000		1.0680	.5110	.1030	.0470	.0590			.0470		.0650	-.0120	.0080	-.0030	-.0220
120.000			.5230	.1630	.1180	.1050			.1580		.0520	-.0490	-.0350	-.0240	-.0210
142.000										.0470					
150.000			.5280	.1860	.1750	.2010			.6270		-.0160	-.0510	-.0350	-.0470	-.0180
157.000								.8520							
162.000									.7650						
165.000											-.0460	-.0620	-.0510	-.0410	-.0250
169.000									.7770						
172.000							.9440								

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AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (2) = 2.999 BETAT (3) = .000

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.5890	1.1290	.4740	.2110	.2010	.2480			1.0280		-.0640	-.0480	-.0450	-.0380	-.0350
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0420							-.1380		-.0890					
40.000	-.0380	-.0150		.0530	.0000	-.0700	-.1000			-.1150					
70.000		-.0540	-.0700	-.0700	-.0470	-.0860	-.1050	-.0490							
90.000		-.0390	-.0570	-.0440	-.0380	-.0620	-.0720	-.0270							
105.000				.0000	-.0210	-.0610	-.0720	-.0260							
110.000									.0190						
120.000		-.0240	-.0310	.1620	.0620	-.0880	-.0970	-.0260	-.0110						
135.000				.3230	.2600	-.0770	-.0940	-.0110							
150.000		-.0140	-.0150	.0950	.1920	-.0450	-.0220	.0390							
165.000		-.0120		.0970	.1720	.0850	.0510	.0200							
180.000		-.0070	-.0060	-.0070											

MACH (2) = 2.999 BETAT (4) = 4.380

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5420	.8340	.3870	.0370	.0090	.0420			.1220		.0840	.0790	.0770	.0280	-.0140
20.000			.3820	.0330	.0010	.0260			.0760		.0530				
40.000			.3780	.0330	.0020	.0480			.0210		.0340	.0820	.0440	-.0070	-.0460
55.000			.3730	.0330	.0040	.0270			.0230		.0330				
70.000			.3660	.0330	-.0130	.0210			.0150		.0340	-.0270	-.0220	-.0190	-.0320
90.000		.9170	.3800	.0340	-.0110	.0140			.0110		.0330	-.0510	-.0590	-.0220	-.0330
120.000			.4180	.1000	.0610	.0610			.0600		-.0430	-.0770	-.0840	-.0720	-.0260
142.000										.0090					
150.000			.4550	.1490	.1370	.1800			.5110		-.0350	-.0800	-.0770	-.0640	-.0520
157.000								.7880							
162.000									.7290						
165.000											-.0740	-.0760	-.0620	-.0520	-.0580
169.000									.7720						
172.000							.8500								
180.000	1.5420	1.1150	.4620	.2050	.1950	.2350			1.0160		-.0600	-.0580	-.0500	-.0460	-.0490
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0370							-.1000		-.0800					
40.000	-.0700	-.0370		-.0220	-.0390	-.0750	-.1110			-.0770					

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB19)

MACH (2) = 2.999 BETAT (4) = 4.380

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6628	.7380	.7889	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
70.000		-.0380	-.0720	-.0690	-.0580	-.0590	-.0680	-.0570		
90.000		-.0430	-.0560	-.0375	-.0290	-.0440	-.0550	-.0520		
105.000				.0080	-.0270	-.0430	-.0550	-.0550		
110.000									.0430	
120.000		-.0180	-.0280	.0370	.0120	-.0790	-.0810	-.0800	-.0450	
135.000				.0570	.2910	-.0800	-.0440	-.0290		
150.000		-.0180	-.0200	.1080	.2670	.1230	.0050	.0130		
165.000		-.0450		-.0150	.2080	.1110	.0440	.0340		
180.000		-.0720	-.0680	-.0280						

MACH (2) = 2.999 BETAT (5) = 8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3266	.3953	.5120
PHI															
.000	1.4950	.8360	.3370	.0180	.0260	.0700			.1810		.0670	.0440	.0600	-.0010	-.0160
20.000			.3180	.0160	.0110	.0260			.2120		.0440				
40.000			.3100	.0160	-.0140	.0000			.0300		-.0260	-.0500	-.0640	-.0780	-.0910
55.000			.2920	.0670	-.0310	-.0010			-.0070		.0230				
70.000			.2720	.0040	-.0440	-.0160			.0010		.0070	-.0450	-.0570	-.0410	-.0520
90.000		.7870	.2770	-.0140	-.0470	-.0190			-.0330		-.0390	-.0770	-.0780	-.0620	-.0450
125.000			.3310	.0500	.0190	.0170			.0190		-.0510	-.1030	-.1120	-.0950	-.0490
142.000										-.0290					
150.000			.3660	.1150	.1070	.1160			.4050		-.0590	-.1100	-.0950	-.0760	-.0680
157.000								.6480							
162.000									.7020						
165.000											-.1030	-.0890	-.0730	-.0680	-.0990
169.000									.7470						
172.000							.7250								
180.000	1.4950	1.0850	.4480	.1980	.1840	.2170			.9720		-.0530	-.0630	-.0650	-.0890	-.1150

X/LB	.5873	.6628	.7380	.7889	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0440							-.1330		-.0970
40.000	-.0990	-.0650		-.0370	-.0840	-.1240	-.1270			-.0830
70.000		-.0590	-.0680	-.0640	-.0380	-.0740	-.0950	-.0690		
90.000		-.0480	-.0580	-.0450	-.0340	-.0660	-.0950	-.0800		
105.000				-.0070	-.0420	-.0660	-.0950	-.0660		
110.000									.0030	
120.000		-.0430	-.0520	.1090	.0030	-.1220	-.1240	-.0820	-.0720	
135.000				.3510	.3250	-.0770	-.0930	-.0490		
150.000		-.1020	-.1150	-.0890	-.0190	-.1060	-.0950	-.0760		

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (2) = 2.999 BETAT (5) = 8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.1150		-.0650	.0080	-.0620	-.0860	-.0630		
180.000		-.1200	-.1090	-.0750						

MACH (3) = 3.502 BETAT (1) = -8.740

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5920	.8480	.3540	.0300	-.0070	.0630			.1640		.1180	.0530	.0510	.0350	-.0070
20.000			.4360	.0520	-.0050	.0860			.1270		.1350				
40.000			.6160	.0680	.0830	.1060			.2790		.1860	.1340	.0680	.0070	.0360
55.000			.7160	.1520	.1740	.1580			.2130		.3350				
70.000			.7830	.2390	.1870	.1730			.2160		.3020	.2150	.1070	.0790	.0560
90.000		1.3820	.8090	.2880	.1980	.1940			.1980		.2370	.1510	.1070	.0690	.0420
125.000			.7510	.3050	.2490	.2740			.3690		.1820	.0510	.0350	.0430	.0160
142.000										.1830					
150.000			.6520	.2590	.2360	.2960			.0660		.0570	.0280	.0140	.0220	.0130
157.000								.9810							
162.000									.9400						
165.000											.0330	.0220	.0190	.0100	.0250
169.000									.8580						
172.000							.8750								
180.000	1.5920	1.1300	.4750	.2360	.1940	.2250			1.0580		-.0240	-.0310	-.0410	-.0630	-.0770

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0180							-.1270		-.0790
40.000	.0220	.0400		.1850	.1710	.0840	.0220			-.0510
70.000		.0000	-.0310	-.0260	-.0090	-.0070	-.0180	.0180		
90.000		.0100	-.0130	-.0140	.0390	.0210	.0340	.0700		
105.000				.0630	.0850	.0710	.0500	.0630		
110.000									.0570	
125.000		.0000	-.0100	.3190	.2270	.0230	.0310	.0760	.0690	
135.000				.2220	.2790	-.0490	-.0620	.0000		
150.000		.0040	-.0040	.0460	.0740	-.0940	-.0750	-.0030		
165.000		.0070		.0460	.0940	-.0030	.0660	.0380		
180.000		-.0880	-.0810	-.0740						

AMES 87-707 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (3) = 3.502 BETAT (2) = -6.540

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6130	.8510	.3550	.0270	.0110	.0640			.1370		.0970	.0810	.0630	.0330	.0010
20.000			.4160	.0440	-.0030	.0760			.0950		.1470				
40.000			.5720	.0420	.0580	.1230			.0890		.2180	.1060	.0580	.0290	.0120
55.000			.6590	.0970	.1320	.1200			.1630		.3010				
70.000			.7160	.2030	.1470	.1320			.1570		.2150	.1740	.0930	.0650	.0410
90.000		1.3220	.7440	.2470	.1610	.1570			.1360		.1760	.0770	.0880	.0580	.0290
120.000			.7040	.2770	.2170	.2340			.3040		.1480	.0300	.0080	.0330	.0130
142.000										.1490					
150.000			.6360	.2520	.2230	.2740			.8010		.0430	.0180	.0020	.0010	.0000
157.000								.9510							
162.000									.9120						
165.000											.0220	.0040	.0050	-.0040	.0110
169.000									.8500						
172.000							.8810								
180.000	1.6130	1.1530	.4850	.2370	.2000	.2300			1.0810		-.0180	-.0290	-.0300	-.0500	-.0500

X/LB	.3073	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0890							-.0740		-.0790
40.000	.0680	.0140		.1520	.1290	.0760	.0450			-.0610
70.000		-.0130	-.0390	-.0340	-.0230	.0220	.0130	.0050		
90.000		-.0010	-.0210	-.0180	.0240	.0330	.0470	.0380		
105.000				.0450	.0520	.0330	.0600	.0420		
110.000									.0420	
120.000		-.0080	-.0180	.2240	.1950	.0370	.0350	.0560	.0480	
135.000				.2150	.2570	.0110	-.0190	-.0100		
150.000		-.0070	-.0140	.0440	.0760	-.0410	-.0250	-.0110		
165.000		.0010		.0430	.0920	.0620	.1120	.0390		
180.000		-.0740	-.0600	-.0510						

MACH (3) = 3.502 BETAT (3) = -4.340

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6280	.8490	.3610	.0590	.0270	.0260			.0770		.0610	.0890	.0860	.0500	.0250
20.000			.3970	.0590	.0300	.0480			.0630		.1370				
40.000			.5290	.0590	.0660	.1120			.0630		.2180	.0950	.0550	.0190	.0100
55.000			.6030	.0690	.0970	.1000			.1270		.1600				
70.000			.6480	.1560	.1090	.1120			.1180		.1430	.1080	.0740	.0430	.0240
90.000		1.2860	.6740	.2060	.1220	.1240			.0930		.1280	.0370	.0480	.0440	.0150
120.000			.6540	.2430	.1850	.1970			.2520		.1180	.0690	-.0130	.0130	.0050

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (3) = 3.502 BETAT (3) = -4.34

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.500										.1210					
150.000			.6050	.2450	.2090	.2520			.7450		.1290	.0030	-.0140	-.0180	-.0090
157.500								.9250							
162.000									.8660						
165.000											.0080	-.0140	-.0150	-.0200	-.0060
169.000									.8440						
172.000							.9000								
180.000	1.6280	1.1700	.4900	.2430	.2010	.2340			1.0950		-.1230	-.0350	-.0320	-.0280	-.0400

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0130							-.1090		-.0660
40.000	.0030	-.0150		.1030	.0900	-.0140	-.0360			-.0740
70.000		-.1260	-.0480	-.0450	-.0280	-.0490	-.0620	-.0240		
90.000		-.0130	-.0340	-.0290	-.0030	-.0360	-.0320	.0140		
105.000				.0230	.0220	-.0230	-.0240	.0170		
110.000									.0250	
120.000		-.0180	-.0260	.1790	.1470	-.0320	-.0440	.0290	.0220	
135.000				.2180	.2450	-.0540	-.0730	-.0150		
150.000		-.0150	-.0240	.0460	.0920	-.0840	-.0720	-.0160		
165.000		-.0110		.0280	.1040	.0350	.0570	.0440		
180.000		-.0550	-.0520	-.0160						

MACH (3) = 3.502 BETAT (4) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6430	.8920	.4490	.0640	.0220	.0240			.0640		.0780	.0850	.0790	.0770	.0260
20.000			.4570	.0720	.0180	.0170			.0430		.0670				
40.000			.5050	.0730	.0490	.0550			.0360		.0870	.0880	.0550	.0250	.0060
55.000			.5150	.0790	.0680	.0580			.0730		.0550				
70.000			.5180	.0960	.0600	.0620			.0640		.0740	.0170	.0060	.0160	-.0420
90.000		1.1220	.5380	.1260	.0620	.0750			.0510		.0690	-.0090	-.0200	.0110	-.0080
120.000			.5440	.1780	.1270	.1310			.1510		.0630	-.0250	-.0370	-.0330	-.0140
142.500										.0760					
150.000			.5460	.1780	.1760	.2090			.0360		.0070	-.0250	-.0380	-.0370	-.0290
157.500								.0890							
162.000									.0070						
165.000											-.0170	-.0380	-.0380	-.0320	-.0300
169.000									.0300						
172.000							.9280								

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-757 IA9 C2A + S3 + T9 ORBITER FUSELAGE (REnB19)

MACH (3) = 3.962 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.6430	1.1860	.4920	.2060	.2010	.2380			1.0980		-.0340	-.0310	-.0290	-.0260	-.0290
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0140							-.0610		-.0650					
40.000	-.0170	-.0370		.0440	.0010	-.0210	-.0440			-.0860					
70.000		-.0460	-.0580	-.0580	-.0470	-.0370	-.0450	-.0450							
90.000		-.0290	-.0450	-.0460	-.0320	-.0220	-.0190	-.0200							
105.000				.0060	-.0130	-.0170	-.0220	-.0240							
110.000									.0160						
120.000		-.0190	-.0260	.1720	.0710	-.0220	-.0350	-.0300	-.0180						
135.000				.2350	.2280	-.0210	-.0250	-.0110							
150.000		-.0150	-.0170	.0630	.1450	.0040	.0150	.0330							
165.000		-.0150		.0650	.1380	.0900	.0820	.0260							
180.000		-.0210	-.0120	-.0060											

MACH (3) = 3.962 BETAT (5) = 4.460

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.6280	.8470	.3770	.0560	.0290	.0210			.0750		.0610	.1020	.0920	.0430	.0090
25.000			.3680	.0560	.0150	.0150			.0410		.0550				
40.000			.3750	.0530	.0180	.0180			.0210		.0320	.0270	.0610	.0150	-.0320
55.000			.3920	.0560	.0210	.0300			.0310		.0150				
70.000			.3900	.0490	.0060	.0290			.0270		.0210	-.0210	-.0440	-.0150	-.0200
90.000		.9710	.4080	.0580	.0110	.0280			.0420		.0040	-.0420	-.0500	-.0460	-.0240
120.000			.4440	.1190	.0770	.0790			.0460		.0130	-.0540	-.0640	-.0590	-.0390
142.000										.0330					
150.000			.4770	.1670	.1480	.1720			.5120		-.0110	-.0520	-.0570	-.0510	-.0470
157.000								.8160							
162.000									.7860						
165.000											-.0490	-.0530	-.0440	-.0390	-.0500
199.000									.8270						
172.000							.8450								
180.000	1.6280	1.1770	.4830	.2180	.2000	.2260			1.0790		-.0350	-.0360	-.0350	-.0330	-.0490
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0210							-.1050		-.0750					
____.000	-.0480	-.0620		-.0130	-.0380	-.0790	-.1080		____	-.0750					

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNB19)

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE

MACH (3) = 3.502 BETAT (5) = 4.460

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7385	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0920	-.0650	-.0590	-.0550	-.0740	-.0820	-.0490		
90.000		-.0360	-.0500	-.0460	-.0290	-.0570	-.0830	-.0470		
105.000				.0150	-.0130	-.0540	-.0850	-.0480		
110.000									-.0470	
120.000		-.0230	-.0270	.0410	-.0120	-.0830	-.0860	-.0490	-.0440	
135.000				.0490	.2700	-.0610	-.0620	-.0260		
150.000		-.0320	-.0300	.0670	.2410	-.0260	-.0340	.0230		
165.000		-.0520		-.0040	.1470	.0260	.0220	.0230		
180.000		-.0640	-.0560	-.0200						

MACH (3) = 3.502 BETAT (6) = 6.660

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5970	.8400	.3480	.0230	.0170	.0550			.1430		.0920	.0700	.0530	.0230	-.0050
20.000			.3170	.0040	-.0040	.0500			.0770		.0290				
40.000			.3380	.0040	-.0180	.0330			.0120		-.0010	.0020	-.0060	-.0350	-.0470
55.000			.3470	.0020	-.0200	.0010			.0120		.0040				
70.000			.3350	.0030	-.0200	-.0020			-.0110		.0060	-.0310	-.0500	-.0280	-.0250
90.000		.8920	.3470	.0300	-.0110	.0000			-.0240		-.0280	-.0640	-.0660	-.0590	-.0260
120.000			.3880	.0860	.0520	.0520			.0120		-.0490	-.0650	-.0740	-.0700	-.0520
142.000										.0110					
150.000			.4360	.1460	.1270	.1530			.0520		-.0220	-.0640	-.0640	-.0570	-.0500
157.000								.7620							
162.000									.0760						
165.000											-.0630	-.0590	-.0480	-.0500	-.0680
169.000									.0890						
172.000							.7830								
180.000	1.5970	1.1590	.4720	.2070	.1920	.2150			1.0570		-.0310	-.0360	-.0420	-.0490	-.0670

X/LB	.5873	.6626	.7390	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.0960		-.0880
40.000	-.0650	-.0650		-.0300	-.0380	-.0690	-.0860			-.0690
70.000		-.0550	-.0690	-.0610	-.0540	-.0470	-.0580	-.0500		
90.000		-.0390	-.0490	-.0440	-.0270	-.0420	-.0550	-.0500		
105.000				-.0020	-.0340	-.0420	-.0680	-.0570		
110.000									-.0190	
120.000		-.0270	-.0330	.0780	.0000	-.0710	-.0770	-.0580	-.0500	
135.000				.2770	.2580	-.0340	-.0440	-.0260		
150.000		-.0560	-.0610	-.0080	.0810	-.0210	-.0020	-.0140		

AMES 87-757 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB19)

MACH (3) = 3.502 BETAT (6) = 6.660

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0690		-.0440	.0470	.0200	-.0240	-.0430		
180.000		-.0880	-.0700	-.0590						

MACH (3) = 3.502 BETAT (7) = 8.860

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.5680	.8390	.3550	.0250	-.0100	.0570			.1650		.0990	.0460	.0520	.0380	-.0090
20.000			.3070	.0030	-.0220	.0520			.1110		.0570				
40.000			.3110	.0010	-.0350	.0220			.0320		-.0270	-.0440	-.0500	-.0610	-.0680
55.000			.3060	.0120	-.0320	-.0150			-.0010		.0030				
70.000			.2870	-.0030	-.0330	-.0150			-.0240		-.0150	-.0400	-.0500	-.0420	-.0330
90.000		.8200	.2980	.0110	-.0260	-.0150			-.0380		-.0470	-.0740	-.0750	-.0720	-.0340
120.000			.3430	.0690	.0320	.0300			.0200		-.0290	-.0730	-.0830	-.0780	-.0670
142.000										-.0030					
150.000			.4040	.1290	.1120	.1270			.3970		-.0310	-.0710	-.0710	-.0620	-.0560
157.000								.6630							
162.000									.7470						
165.000											-.0680	-.0650	-.0550	-.0680	-.0790
169.000									.7880						
172.000							.7160								
180.000	1.5880	1.1360	.4680	.2050	.1880	.1970			1.0300		-.0260	-.0370	-.0500	-.0670	-.1900

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0180							-.1040		-.0860
40.000	-.0780	-.0780		-.0360	-.0450	-.0820	-.0950			-.0680
70.000		-.0575	-.0700	-.0610	-.0600	-.0450	-.0610	-.0475		
90.000		-.0380	-.0480	-.0520	-.0320	-.0500	-.0600	-.0510		
105.000				-.0200	-.0290	-.0520	-.0700	-.0560		
110.000									-.0140	
120.000		-.0440	-.0540	.0650	-.0290	-.0730	-.0820	-.0640	-.0560	
135.000				.1250	.2130	-.0480	-.0600	-.0450		
150.000		-.0880	-.0930	-.0750	-.0470	-.0600	-.0750	-.0630		
165.000		-.0980		-.0690	-.0360	-.0560	-.0730	-.0750		
180.000		-.0990	-.0910	-.0790						

AMES 87-757 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB2D) (15 MAY 73)

REFERENCE DATA

SREF = 2.421D SQ.FT. XMRP = 28.539D INCHES
LREF = 39.849D INCHES YMRP = .0000 INCHES
BREF = 39.849D INCHES ZMRP = .0000 INCHES
SCALE = .03D SCALE

PARAMETRIC DATA

ALPHAT = 4.00D ORBINC = .5D
RUDDER = -15.00D ELEVON = .00D
RUDFLR = .00D

MACH (1) = 2.499 BETAT (1) = -8.41D

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.00	1.2990	.9280	.4610	.0360	.0720	.1920			.0670		.0310	-.0020	-.0050	-.0380	-.0480
20.00			.5410	.0940	.0690	.1130			.0970		.0120				
40.00			.6690	.1930	.1460	.2150			.1390		.0590	.0020	-.0130	-.0270	.1150
55.00			.6990	.2390	.2070	.3860			.2880		.1910				
70.00			.7030	.2390	.1830	.4130			.3270		.2420	.0870	.0070	-.0080	.0030
90.00		1.1440	.6730	.2180	.1710	.2370			.3630		.3120	.0750	-.0070	-.0190	-.0240
120.00			.5920	.2080	.1820	.2620			.4440		.2240	.0410	-.0220	-.0590	-.0520
142.00										.1260					
150.00			.4920	.1560	.1570	.2300			.7010		.0040	-.0380	-.0160	-.0310	-.0570
157.00								.7680							
162.00									.6980						
165.00											-.0560	.0170	.0160	-.0180	-.0570
169.00									.5850						
172.00							.7270								
180.00	1.2990	.8770	.3280	.1190	.1160	.1970			.7530		-.1150	-.1090	-.1180	-.1540	-.1590

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.00	-.0250							-.1200		-.1010
40.00	.1080	.0840		.2230	.1680	.1290	.0070			-.1210
70.00		-.0230	-.0410	-.0380	-.0430	.0220	-.0050	-.0210		
90.00		-.0180	-.0260	-.0190	.0780	.0460	.0350	.0080		
105.00				.1110	.1440	.0450	.0310	-.0030		
110.00									.0530	
120.00		-.0540	-.0600	.3920	.3030	.0650	.0240	.0080	-.0050	
135.00				.1430	.1790	-.0710	-.0950	-.0910		
150.00		-.0670	-.0700	-.0180	-.0140	-.1160	-.0950	-.0760		
165.00		-.0570		.0190	.0520	.0050	.0550	.0030		
180.00		-.1270	-.1200	-.0730						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB2U)

MACH (1) = 2.499 BETAT (2) = -6.290

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1508	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3190	.9230	.4660	.0650	.1220	.1390			.1330		.0550	.0670	.0290	-.0310	-.0580
20.000			.5250	.1020	.1200	.1010			.1290		.0430				
40.000			.6330	.1750	.1670	.1730			.1160		.0520	.0080	-.0170	-.0230	.0580
55.000			.6520	.2060	.1790	.3360			.2520		.1630				
70.000			.6430	.1870	.1450	.3840			.2860		.2180	.0650	-.0110	-.0280	-.0220
90.000		1.0980	.6170	.1780	.1330	.2050			.3310		.2800	.0530	-.0190	-.0350	-.0410
120.000			.5520	.1810	.1520	.2170			.3540		.1930	.0200	-.0310	-.0590	-.0610
142.000										.0870					
150.000			.4760	.1440	.1480	.2170			.6700		-.0210	-.0210	-.0360	-.0390	-.0640
157.000								.7640							
162.000									.6730						
165.000											-.0720	-.0290	-.0430	-.0280	-.0630
169.000									.5960						
172.000							.6860								
180.000	1.3190	.8950	.3370	.1240	.1210	.1920			.7790		-.1170	-.1160	-.0870	-.1340	-.1300

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0300							-.1170		-.0920
40.000	.0840	.0570		.1800	.1350	.0900	-.0270			-.1250
70.000		-.0510	-.0800	-.0520	-.0460	-.0460	-.0330	-.0480		
90.000		-.0410	-.0490	-.0320	.0550	.0160	.0030	-.0110		
105.000				.0780	.1080	.0160	.0020	-.0220		
110.000									.0340	
120.000		-.0660	-.0680	.3040	.2700	.0270	-.0050	-.0090	-.0160	
135.000				.1520	.1810	-.0570	-.0990	-.0730		
150.000		-.0690	-.0710	-.0060	.0120	-.1110	-.0900	-.0780		
165.000		-.0660		.0150	.0620	.0360	.0800	.0040		
180.000		-.1010	-.0980	-.0640						

MACH (1) = 2.499 BETAT (3) = -4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3320	.9070	.4360	.0430	.1240	-.0180			.1840		.0930	.0780	.0540	-.0180	-.0770
20.000			.4850	.0710	.1330	-.0080			.1570		.0620				
40.000			.5820	.1290	.1500	.1310			.1390		.0600	.0120	.0000	-.0230	.0130
55.000			.5940	.1290	.1330	.2740			.2180		.1460				
70.000			.5790	.1290	.0990	.2210			.2480		.1920	.0450	-.0240	-.0410	-.0480
90.000		1.0480	.5580	.1330	.0870	.1570			.2470		.2390	.0420	-.0280	-.0500	-.0630
1 00			.5120	.1510	.1210	.1730			*0		.1610	.0010	-.0430	-.0620	-.0740

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (PBNB2U)

MACH (1) = 2.499 BETAT (3) = -4.17U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000									.625U	.040U	-.041U	-.049U	-.055U	-.048U	-.078U
150.000			.458U	.129U	.135U	.195U		.753U							
157.000									.641U		-.088U	-.074U	-.036U	-.034U	-.067U
162.000															
165.000									.599U						
169.000							.712U				-.121U	-.126U	-.069U	-.093U	-.103U
172.000									.796U						
180.000	1.332U	.908U	.341U	.123U	.126U	.173U									
X/LB	.5873	.6626	.7380	.7869	.8283	.8648	.9262	.9639	1.0015	1.0392					
PHI								-.095U		-.077U					
.000	-.082U									-.132U					
4.000	.053U	.028U		.138U	.095U	.061U	-.038U								
7.000		-.069U	-.074U	-.071U	-.053U	-.024U	-.043U	-.053U							
9.000		-.059U	-.053U	-.040U	.021U	.010U	-.040U	-.029U							
115.000				.059U	.070U	.062U	-.028U	-.038U							
120.000									.049U						
125.000		-.074U	-.070U	.234U	.219U	.015U	-.007U	-.024U	-.029U						
135.000				.156U	.198U	-.052U	-.077U	-.053U							
150.000		-.069U	-.064U	.028U	.055U	-.082U	-.047U	-.048U							
165.000		-.068U		.032U	.083U	.065U	.067U	-.013U							
180.000		-.072U	-.069U	-.055U											

MACH (1) = 2.499 BETAT (4) = .6U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2256	.2711	.3200	.3953	.5120
PHI															
.000	1.354U	.941U	.421U	.035U	.127U	.003U			.184U		.165U	.089U	.076U	-.025U	-.092U
2.000			.433U	.035U	.129U	-.011U			.197U		.121U				
4.000			.502U	.056U	.098U	-.002U			.211U		.072U	.038U	.033U	-.038U	-.044U
55.000			.506U	.056U	.061U	.057U			.137U		.121U				
7.000			.458U	.054U	.027U	.091U			.116U		.159U	.023U	-.048U	-.063U	-.072U
9.000		.937U	.438U	.054U	.022U	.072U			.089U		.166U	.020U	-.044U	-.058U	-.078U
12.000			.419U	.085U	.062U	.084U			.166U		.145U	-.052U	-.054U	-.072U	-.081U
142.000									.526U	-.021U					
150.000			.405U	.085U	.105U	.145U		.707U			-.071U	-.106U	-.091U	-.057U	-.054U
157.000									.583U						
162.000											-.113U	-.117U	-.096U	-.049U	-.045U
165.000									.596U						
169.000							.767U								
172.000															

AXES 87-707 IA9 OBA + 93 + 79 ORBITER FUSELAGE (RBAB2U)

MACH (1) = 2.499 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
180.000	1.3540	.9270	.3470	.1250	.1280	.1800			.7980		-.1280	-.1090	-.1030	-.0620	-.0330
X/LB	.5873	.6626	.7380	.7880	.8283	.8848	.9282	.9639	1.0015	1.0392					
PHI															
.000	-.0990							-.0870		-.0580					
40.000	.0240	-.0050		.0420	.0130	-.0180	-.0630			-.0690					
75.000		-.0920	-.0930	-.0690	-.0490	-.0570	-.0770	-.0730							
90.000		-.0790	-.0720	-.0180	-.0130	-.0380	-.0580	-.0580							
105.000				.0080	.0130	-.0330	-.0550	-.0630							
115.000									-.0580						
125.000		-.0480	-.0590	.0020	.0920	-.0350	-.0510	-.0390	-.0430						
135.000				.2230	.2220	-.0330	-.0530	-.0050							
150.000		-.0520	-.0540	.0730	.1630	-.0370	-.0670	.0190							
165.000		-.0580		.0520	.1810	.0990	.0590	-.0210							
180.000		-.0470	-.0490	-.0480											

MACH (1) = 2.499 BETAT (5) = 4.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1953	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.3310	.9150	.4490	.0640	.1190	.0000			.1890		.0680	.0420	.0490	-.0270	-.0790
25.000			.4210	.0810	.1190	.0000			.2480		.1090				
40.000			.4250	.0450	.0890	-.0040			.1210		.0680	.0080	-.0010	-.0690	-.0980
55.000			.4120	.0450	.0210	-.0040			.0140		.1120				
75.000			.3530	.0430	-.0130	.0340			.0220		.1240	.0040	-.0590	-.0780	-.0940
90.000		.8170	.3240	-.0490	-.0190	.0340			.0490		.0280	-.0110	-.0530	-.0790	-.0920
125.000			.3210	.0320	.0110	.0320			.0460		-.0130	-.0120	-.0840	-.0750	-.0630
142.000										-.0630					
150.000			.3390	.0670	.0720	.1260			.4180		-.0980	-.1330	-.1190	-.0880	-.0370
157.000								.0470							
162.000									.5450						
165.000											-.1390	-.1350	-.1140	-.0750	-.0420
169.000									.5990						
172.000							.7160								
180.000	1.3310	.9130	.3370	.1180	.1220	.1650			.7840		-.1250	-.1200	-.0940	-.0910	-.1110
X/LB	.5873	.6626	.7380	.7880	.8283	.8848	.9282	.9639	1.0015	1.0392					
PHI															
.000	-.0850							-.0990		-.0770					
40.000	-.0140	.0530		-.0440	-.0480	-.0650	-.1380			-.0740					

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB2U)

MACH (1) = 2.499 BETAT (5) = 4.31U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.738U	.7869	.8283	.8848	.9262	.9539	1.UU15	1.U392
PHI										
7U.UUU		-.U85U	-.U92U	-.U99U	-.U69U	-.U79U	-.U92U	-.U89U		
9U.UUU		-.U71U	-.U78U	-.U48U	-.U57U	-.U56U	-.U78U	-.U77U		
115.UUU				-.U67U	-.U37U	-.U55U	-.U78U	-.U84U		
11U.UUU									-.U42U	
12U.UUU		-.U67U	-.U64U	.U7UU	.U4UU	-.U54U	-.U87U	-.U61U	-.U55U	
135.UUU				.3U4U	.234U	-.U72U	-.U57U	-.U42U		
15U.UUU		-.U58U	-.U62U	.1UUU	.251U	.U25U	-.U52U	-.U16U		
165.UUU		-.U58U		-.U26U	.189U	.U91U	.U3UU	-.U11U		
18U.UUU		-.U73U	-.U75U	-.U59U						

MACH (1) = 2.499 BETAT (6) = 5.43U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.U075	.U188	.U339	.U6U2	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.32U6	.3953	.512U
PHI															
.UUU	1.3125	.919U	.453U	.U8UU	.U94U	.178U			.126U		.U53U	.U58U	.U17U	-.U38U	-.U56U
2U.UUU			.417U	.U8UU	.U7UU	.U97U			.197U		.U52U				
4U.UUU			.392U	.U32U	.U52U	-.U16U			.121U		.U14U	-.U2UU	-.U39U	-.U93U	-.U81U
55.UUU			.359U	.U32U	-.U68U	-.U11U			-.U11U		.U72U				
7U.UUU			.3U3U	-.U18U	-.U39U	.UUUU			.U11U		.U73U	-.U15U	-.U57U	-.U88U	-.1U1U
9U.UUU		.758U	.27UU	-.U38U	-.U35U	.UUUU			.U34U		.U11U	-.U45U	-.U54U	-.U88U	-.U95U
12U.UUU			.275U	.UU8U	-.U16U	.U14U			.U12U		-.U51U	-.12UU	-.116U	-.U79U	-.U59U
142.UUU										-.U68U					
15U.UUU			.3U9U	.U53U	.U52U	.U97U			.367U		-.112U	-.148U	-.132U	-.U82U	-.U47U
157.UUU								.588U							
162.UUU									.526U						
165.UUU											-.15UU	-.141U	-.121U	-.1U2U	-.U84U
169.UUU									.585U						
172.UUU							.643U								
18U.UUU	1.3125	.9U1U	.328U	.113U	.113U	.157U			.768U		-.122U	-.124U	-.1UUU	-.143U	-.136U

X/LB	.5873	.6626	.738U	.7869	.8283	.8848	.9262	.9639	1.UU15	1.U392
PHI										
.UUU	-.U34U							-.1U8U		-.U97U
4U.UUU	-.U28U	.U49U		-.U3UU	-.U82U	-.U76U	-.113U			-.U93U
7U.UUU		-.U85U	-.U97U	-.U99U	-.U79U	-.U78U	-.114U	-.U93U		
9U.UUU		-.U72U	-.U85U	-.U55U	-.U63U	-.U66U	-.U83U	-.U86U		
115.UUU				-.U16U	-.U48U	-.U66U	-.U89U	-.U88U		
11U.UUU									-.U56U	
12U.UUU		-.U78U	-.U72U	.U47U	.U11U	-.1UUU	-.U95U	-.U83U	-.U75U	
135.UUU				.399U	.266U	-.1UUU	-.U84U	-.U71U		
15U.UUU		-.U65U	-.U71U	.U63U	.195U	-.U65U	-.U41U	-.U4UU		

AMES 87-757 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RBNB25)

MACH (1) = 2.499 BETAT (6) = 6.43

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
195.000		-.0750		-.0480	.1240	.0120	.0130	-.0390		
180.000		-.1000	-.1010	-.0730						

MACH (1) = 2.499 BETAT (7) = 8.56

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0682	.1355	.1546	.1581	.1732	.1958	.2299	.2711	.3240	.3953	.5125
PHI															
.000	1.2920	.9160	.4510	.0330	.0650	.1920			.0800		.0290	-.0630	-.0110	-.0360	-.0440
20.000			.4010	.0290	.0480	.1490			.0650		.0310				
40.000			.3750	.0240	.0130	-.0630			.0610		-.0560	-.0630	-.0870	-.1100	-.1020
55.000			.3270	-.0110	-.0350	-.0330			-.0300		.0030				
75.000			.2610	-.0110	-.0560	-.0220			-.0010		.0380	-.0220	-.0650	-.0940	-.1050
90.000		.0890	.2250	-.0610	-.0570	-.0290			-.0180		.0010	-.0740	-.0680	-.0880	-.0940
120.000			.2380	-.0140	-.0350	-.0330			.0180		-.0890	-.1420	-.1310	-.0830	-.0630
142.000										-.1420					
150.000			.2810	.0380	.0380	.0300			.0950		-.1260	-.1570	-.1430	-.1990	-.1810
157.000								.4080							
182.000									.5170						
185.000											-.1670	-.1510	-.1270	-.1440	-.1420
190.000									.5690						
172.000							.5580								
180.000	1.2980	.8960	.3240	.1110	.1150	.1690			.7390		-.1190	-.1210	-.1270	-.1600	-.1650

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.1270							-.1400		-.1570
40.000	-.0630	-.0190		-.1550	-.0480	-.1300	-.1390			-.1420
75.000		-.1050	-.1340	-.1540	-.1840	-.1980	-.1370	-.1980		
90.000		-.0720	-.1070	-.1680	-.1620	-.1090	-.1160	-.1920		
105.000				-.1290	-.1650	-.1800	-.1150	-.1910		
115.000									-.1980	
125.000		-.1050	-.0780	.0620	.0190	-.1350	-.1310	-.1980	-.1920	
135.000				.3080	.3080	-.1310	-.0930	-.1490		
150.000		-.1050	-.1180	-.0380	-.1640	-.1280	-.1120	-.1980		
165.000		-.1250		-.0780	.0170	-.1990	-.0320	-.1110		
180.000		-.1290	-.1220	-.0740						

AMES 87-757 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB25)

MACH (2) = 2.999 BETAT (1) = -8.57

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3180	.7750	.3600	.0210	.0060	.0580			.1370		.0340	.0200	.0260	-.0180	-.0230
20.000			.4260	.0570	.0060	.1430			.1720		.0670				
40.000			.5740	.0820	.0940	.3640			.2050		.0870	.0640	-.0050	-.0040	.0270
55.000			.6490	.1440	.1630	.3340			.3470		.2430				
70.000			.6880	.2070	.1600	.2960			.4110		.2890	.1300	.0460	.0260	.0140
90.000		1.1610	.6810	.2330	.1580	.2080			.2460		.3200	.1310	.0420	.0110	-.0050
120.000			.5990	.2240	.1780	.2230			.3170		.1730	.0610	.0230	-.0210	-.0390
142.000										.1230					
150.000			.4990	.1760	.1550	.2130			.6730		.0690	-.0100	-.0040	-.0080	-.0230
157.000								.7560							
162.000									.7560						
165.000											-.0200	-.0110	.0010	.0160	-.0200
169.000									.6200						
172.000							.6650								
180.000	1.3160	.8890	.3420	.1320	.1150	.1340			.7780		-.0710	-.0790	-.0850	-.0990	-.1230

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0400							-.1220		-.0930
40.000	.0800	.0790		.2030	.1670	.1050	.0250			-.0780
70.000		-.0240	-.0470	-.0390	-.0280	.0050	-.0080	-.0010		
90.000		-.0180	-.0360	-.0300	.0640	.0280	.0270	.0420		
105.000				.0580	.0910	.1130	.0410	.0340		
110.000									.0870	
120.000		-.0410	-.0450	.3050	.2220	.0740	.0270	.0390	.0270	
135.000				.1570	.1880	-.0690	-.0820	-.0500		
150.000		-.0430	-.0500	-.0090	.0100	-.1200	-.1010	-.0350		
165.000		-.0430		.0090	.0390	-.0340	.0440	.0020		
180.000		-.1140	-.1020	-.0770						

MACH (2) = 2.999 BETAT (2) = -4.25

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3680	.8440	.3950	.0390	.0510	-.0250			.1410		.0990	.0560	.0040	.0210	-.0300
20.000			.4490	.0560	.0440	-.0240			.2370		.0690				
40.000			.5330	.0560	.0770	.0740			.1730		.0980	.0520	.0040	-.0150	-.0100
55.000			.5570	.0650	.1060	.1290			.2590		.1780				
70.000			.5720	.1170	.0990	.1230			.1350		.2350	.0840	.0130	-.0080	-.0240
90.000		1.0710	.5700	.1510	.0880	.1230			.1160		.2060	.0810	.0130	-.0140	-.0360
120.000			.5240	.1670	.1240	.1470			.2060		.0820	-.0120	-.0080	-.0300	-.0510

AMES 87-757 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB2U)

MACH (2) = 2.999 BETAT (2) = -4.250

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.1444	.1675	.1888	.2339	.2682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0820					
150.000			.4830	.1890	.1320	.1750			.5890		-.1290	-.1430	-.1490	-.1370	-.1460
157.000								.7180							
162.000									.6490						
165.000											-.1470	-.1550	-.1460	-.1290	-.1370
169.000									.6180						
172.000							.6880								
180.000	1.3680	.9280	.3540	.1380	.1200	.1500			.8150		-.1750	-.1620	-.1770	-.1710	-.1870

X/LB	.5873	.6828	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0580							-.1240		-.0730
40.000	.0330	.0430		.1380	.0970	.0180	-.0380			-.1030
70.000		-.0830	-.0810	-.0740	-.0530	-.0860	-.0730	-.0450		
90.000		-.0580	-.0750	-.0680	-.0110	-.0380	-.0420	-.0110		
105.000				-.0010	.0110	.0090	-.0290	-.0130		
110.000									.0330	
120.000		-.0610	-.0670	.1630	.1180	-.0190	-.0320	-.0030	-.0110	
135.000				.1300	.1580	-.0990	-.1030	-.0510		
150.000		-.0570	-.0810	-.0240	.0240	-.1160	-.1050	-.0560		
165.000		-.0580		.0000	.0380	-.0070	.0010	-.0170		
180.000		-.0730	-.0880	-.0630						

MACH (2) = 2.999 BETAT (3) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.1075	.0188	.0339	.0682	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3940	.8580	.4020	.1280	.0390	-.0380			.0180		.1340	.1120	.0990	.0370	-.0290
20.000			.4170	.1240	.0320	-.0290			.0190		.1250				
40.000			.4550	.1250	.1260	.1290			.0290		.1180	.0460	.0210	.0190	-.0330
55.000			.4530	.0360	.0430	.0720			.0620		.1320				
70.000			.4470	.0440	.0270	.0530			.0640		.0960	.0530	-.0090	-.0310	-.0470
90.000		.9520	.4450	.0560	.0250	.0550			.0360		.0790	.0070	-.0270	-.0330	-.0550
120.000			.4280	.1540	.0750	.0770			.1250		.0270	-.0590	-.0620	-.0370	-.0590
142.000										.0180					
150.000			.4110	.1050	.1560	.1360			.4930		-.1430	-.1720	-.1770	-.1610	-.1430
157.000								.6990							
162.000									.5990						
165.000											-.1710	-.1610	-.1770	-.1690	-.1390
169.000									.6180						
172.000							.7000								

AMES 87-757 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB2U)

MACH (2) = 2.999 BETAT (3) = .0U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3940	.9480	.3570	.1350	.1240	.1590			.8320		-.0860	-.0760	-.0750	-.0640	-.0390
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0650							-.1190		-.0750					
40.000	-.0590	.0460		.0500	.0120	-.0140	-.0710			-.1150					
70.000		-.0830	-.0990	-.0910	-.0660	-.0790	-.1090	-.0690							
90.000		-.0730	-.0850	-.0580	-.0480	-.0590	-.0660	-.0500							
105.000				-.0320	-.0350	-.0440	-.0620	-.0480							
110.000									.0220						
120.000		-.0610	-.0840	.0380	.0180	-.0720	-.0520	-.0300	-.0270						
135.000				.1840	.1750	-.0780	-.0780	-.0290							
150.000		-.0420	-.0480	.0440	.1350	-.0580	-.0370	-.0240							
165.000		-.0380		.0180	.1230	.0600	.0290	-.0110							
180.000		-.0330	-.0370	-.0350											

MACH (2) = 2.999 BETAT (4) = 4.39U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3820	.8670	.4020	.1430	.0380	-.0210			.1410		.1140	.0520	.0710	.0140	-.0350
20.000			.4020	.0350	.0340	-.0220			.0470		.1400				
40.000			.4260	.0350	.0230	-.0210			-.0290		.0680	.0460	.0570	-.0290	-.0700
55.000			.4040	.0350	.0070	-.0230			-.0340		.0220				
70.000			.3580	.0340	-.0140	.0150			.0170		.0130	-.0330	-.0210	-.0480	-.0620
90.000		.8170	.3200	.0360	-.0160	.0150			-.0340		.0150	-.0560	-.0610	-.0440	-.0660
120.000			.3320	.0570	.0230	.0360			.0240		-.0180	-.0840	-.0870	-.0760	-.0500
142.000										-.0260					
150.000			.3490	.0680	.0770	.1570			.0830		-.0620	-.0960	-.0950	-.0820	-.0440
157.000								.6310							
162.000									.5730						
165.000											-.0940	-.0970	-.0860	-.0740	-.0640
169.000									.6070						
172.000							.6570								
180.000	1.3820	.9330	.3490	.1290	.1200	.1450			.8040		-.0820	-.0840	-.0810	-.0740	-.0940
X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392					
PHI															
.000	-.0840							-.1280		-.0770					
40.000	-.0910	-.0250		-.0090	-.0340	-.1010	-.1430			-.0670					

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AMES 87-757 IA9 OEA + 33 + T9 ORBITER FUSELAGE (PSNB25)

MACH (2) = 2.999 BETAT (4) = 4.39

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6828	.7380	.7889	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
7).000		-.0985	-.1085	-.1080	-.0780	-.1115	-.1170	-.0720		
9).000		-.0795	-.1080	-.0840	-.1080	-.0820	-.1020	-.0680		
105.000				-.0340	-.0960	-.0980	-.1030	-.0670		
111.000									-.0025	
12).000		-.0480	-.0380	.0350	-.0510	-.0220	-.0140	-.0540	-.0470	
135.000				.2500	.1980	-.0980	-.0980	-.0490		
15).000		-.0420	-.0480	.1080	.2130	-.0160	-.0740	-.0110		
165.000		-.0470		-.0390	.1220	.0350	.0000	.0190		
18).000		-.0790	-.0720	-.0980						

MACH (2) = 2.999 BETAT (5) = 8.72

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0180	.0339	.0502	.1355	.1548	.1581	.1732	.1958	.2259	.2711	.3250	.3953	.5122
PHI															
.000	1.3048	.7720	.3460	.0420	.0040	-.0670			.1380		.0310	.0220	.0270	-.0230	-.0310
2).000			.3190	.0690	-.0130	.0120			.1090		.0040				
4).000			.3080	.0970	-.0310	-.0130			.0220		-.0380	-.0570	-.0720	-.0820	-.0990
55.000			.2820	.0440	-.0420	-.0280			-.0230		-.0110				
7).000			.2390	.0010	-.0530	-.0320			-.0220		.0020	-.0380	-.0570	-.0880	-.0750
9).000		.0790	.2240	-.0340	-.0390	-.0330			-.0420		-.0330	-.0720	-.0790	-.0880	-.0730
12).000			.2440	.0180	-.0160	-.0160			-.0190		-.0690	-.1110	-.1140	-.0920	-.0920
142.000										-.0590					
15).000			.2840	.0570	.0470	.0410			.2080		-.0830	-.1150	-.1110	-.0920	-.0880
157.000								.4980							
182.000									.5420						
185.000											-.1160	-.1110	-.0970	-.1140	-.1220
189.000									.3770						
172.000							.5340								
19).000	1.3048	.8970	.3320	.1180	.1190	.1290			.7590		-.0790	-.0850	-.0990	-.1120	-.1350

X/LB .5873 .6828 .7380 .7889 .8283 .8848 .9282 .9639 1.0015 1.0392

PHI										
.000	-.1420							-.1250	-.0910	
4).000	-.1040	-.0910		-.0940	-.0990	-.1180	-.1180		-.0890	
7).000		-.1010	-.0910	-.1090	-.1030	-.1190	-.1140	-.1040		
9).000		-.0760	-.0780	-.0780	-.0880	-.1080	-.1170	-.1010		
105.000				-.0920	-.0570	-.1120	-.1140	-.1030		
111.000									-.0110	
12).000		-.1070	-.0740	.0550	-.0190	-.1270	-.1280	-.1050	-.0740	
139.000				.2880	.1910	-.0780	-.1090	-.0570		
15).000		-.1110	-.1120	-.0720	-.0940	-.1260	-.1130	-.1040	-	

AMES 97-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB2U)

MACH (2) = 2.999 BETAT (5) = 8.72U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
183.UUU		-.128U		-.089U	-.066U	-.078U	-.076U	-.091U		
180.UUU		-.123U	-.111U	-.085U						

MACH (3) = 3.5U2 BETAT (1) = -8.72U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.UUU	1.344U	.743U	.339U	.028U	.012U	.038U			.174U		.072U	.031U	.023U	.017U	-.030U
20.UUU			.398U	.052U	.043U	.072U			.163U		.098U				
40.UUU			.562U	.142U	.082U	.112U			.274U		.134U	.096U	.031U	-.016U	.023U
55.UUU			.651U	.146U	.150U	.182U			.419U		.276U				
70.UUU			.700U	.219U	.160U	.188U			.256U		.337U	.165U	.075U	.049U	.025U
90.UUU		1.197U	.702U	.245U	.153U	.190U			.234U		.284U	.158U	.072U	.034U	.011U
120.UUU			.617U	.237U	.184U	.216U			.281U		.142U	.039U	.042U	.006U	-.023U
142.UUU										.139U					
150.UUU			.599U	.184U	.159U	.209U			.671U		.026U	-.002U	-.007U	.001U	-.013U
157.UUU								.760U							
162.UUU									.727U						
165.UUU											.103U	.002U	-.006U	.010U	.000U
169.UUU									.657U						
172.UUU							.677U								
180.UUU	1.344U	.918U	.354U	.155U	.117U	.127U			.794U		-.040U	-.051U	-.067U	-.072U	-.092U

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.UUU	-.128U							-.121U		-.077U
40.UUU	.030U	.089U		.195U	.160U	.053U	.025U			-.054U
70.UUU		-.018U	-.044U	-.034U	-.024U	-.017U	-.029U	.012U		
90.UUU		-.012U	-.029U	-.027U	.029U	.027U	.006U	.091U		
105.UUU				.031U	.058U	.077U	.037U	.053U		
110.UUU									.058U	
120.UUU		-.035U	-.038U	.266U	.182U	.026U	.023U	.053U	.043U	
135.UUU				.155U	.188U	-.071U	-.081U	-.039U		
150.UUU		-.029U	-.038U	-.002U	.021U	-.111U	-.099U	-.036U		
165.UUU		-.029U		.009U	.036U	-.049U	.014U	.005U		
180.UUU		-.092U	-.088U	-.078U						

AMES 87-707 IA9 OA + S3 + T9 ORBITER FUSELAGE (RBNB29)

MACH (3) = 3.942 BETAT (2) = -0.53

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3770	.8440	.3890	.0390	.0090	.0160			.0980		.0750	.0370	.0260	.0140	-.0230
20.000			.4300	.0650	.0120	.0660			.1260		.0980				
40.000			.5400	.0650	.0610	.1100			.2300		.1280	.0940	.0300	-.0110	-.0420
55.000			.6010	.0880	.1260	.1300			.1350		.2310				
70.000			.6390	.1740	.1210	.1370			.1550		.1830	.1430	.0640	.0290	.0060
90.000		1.1500	.6450	.2550	.1260	.1350			.1420		.1920	.1120	.0570	.0150	-.0060
120.000			.5770	.2070	.1550	.1790			.2140		.1180	.0140	.0110	-.0040	-.0310
142.000										.1050					
150.000			.4920	.1730	.1470	.1880			.6220		.0150	-.0120	-.0230	-.0160	-.0250
157.000								.7360							
162.000									.6950						
165.000											-.0060	-.0190	-.0240	-.0160	-.0090
169.000									.6450						
172.000							.6940								
180.000	1.3770	.9080	.3630	.1730	.1230	.1350			.8130		-.0430	-.0540	-.0610	-.0690	-.0830

X/LB	.5875	.6626	.7380	.7880	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0340							-.1220		-.0730
40.000	-.0010	.0320		.1710	.1220	.0270	-.0040			-.0630
70.000		-.0340	-.0580	-.0480	-.0410	-.0430	-.0510	-.0110		
90.000		-.0280	-.0420	-.0410	.0440	-.0280	-.0210	.0230		
105.000				.0110	.0240	.0230	.0090	.0210		
115.000									.0330	
120.000		-.0420	-.0450	.1950	.1410	-.0150	-.0080	.0260	.0210	
135.000				.1320	.1650	-.0810	-.0930	-.0370		
150.000		-.0370	-.0430	-.0120	.0120	-.1170	-.1030	-.0410		
165.000		-.0360		-.0160	.0190	-.0530	.0030	-.0010		
180.000		-.0670	-.0780	-.0580						

MACH (3) = 3.942 BETAT (3) = -4.33

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.4000	.8980	.4420	.0580	.0380	-.0250			.0310		.0910	.0650	.0340	.0420	-.0080
20.000			.4740	.0780	.0330	-.0060			.0970		.1070				
40.000			.5530	.0780	.0680	.0920			.0400		.1330	.0610	.0290	-.0050	-.0180
55.000			.5750	.0970	.1580	.1900			.1180		.1920				
70.000			.5780	.1390	.0980	.0990			.1150		.1460	.1170	.0480	.0110	-.0110
90.000		1.0940	.5830	.1660	.0970	.1040			.0980		.1210	.0630	.0380	.0050	-.0190
120.000			.5530	.1780	.1350	.1480			.1560		.0840	-.0060	-.0220	-.0160	-.0320

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB20)

MACH (3) = 3.502 BETAT (3) = -4.330

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI										.0810					
142.000									.5760		.0010	-.0220	-.0380	-.0300	-.0340
150.000			.4740	.1780	.1390	.1710		.7200							
157.000									.6610						
162.000											-.0180	-.0370	-.0360	-.0370	-.0250
165.000									.6430						
169.000							.7190								
172.000									.8320		-.0450	-.0580	-.0560	-.0580	-.0620
180.000	1.4000	.9580	.3680	.1480	.1270	.1460									

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI								-.0960		-.0670
.000	-.0390									-.0730
40.000	-.0120	.0390		.1300	.0810	.0100	-.0150			
70.000		-.0470	-.0670	-.0570	-.0540	-.0530	-.0570	-.0320		
90.000		-.0410	-.0570	-.0510	-.0230	-.0360	-.0260	-.0040		
105.000				-.0130	.0020	-.0110	-.0140	-.0020	.0170	
115.000									.0000	
120.000		-.0520	-.0560	.1470	.0870	-.0300	-.0290	.0050		
135.000				.0920	.1470	-.0750	-.0850	-.0390		
150.000		-.0430	-.0500	-.0050	.0150	-.0940	-.0860	-.0500		
165.000		-.0390		-.0070	.0120	-.0150	-.0440	-.0130		
180.000		-.0690	-.0650	-.0510						

MACH (3) = 3.502 BETAT (4) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI									-.0030		.0910	.1110	.0690	.0740	.0060
.000	1.4180	.9740	.4800	.0700	.0310	-.0230			-.0160		.0950				
20.000			.4920	.0820	.0310	-.0270			-.0120		.1260	.0610	.0270	.0120	-.0140
40.000			.5470	.0850	.0520	-.0020			.0500		.0460				
55.000			.5360	.0920	.0710	.0470			.0580		.0390	.0110	.0190	-.0130	-.0300
70.000			.4840	.0980	.0560	.0500			.0480		.0630	-.0080	-.0240	-.0110	-.0320
90.000		.9860	.4630	.0960	.0500	.0580			.0940		.0390	-.0320	-.0490	-.0400	-.0320
120.000			.4370	.0960	.0830	.0910				.0380					
142.000									.4750		-.0150	-.0420	-.0560	-.0520	-.0380
150.000			.4210	.1250	.1140	.1370		.6780							
157.000									.6150						
162.000											-.0370	-.0540	-.0560	-.0490	-.0400
165.000									.6340						
169.000							.7040								
172.000															

AMES 67-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB2U)

MACH (3) = 3.5U2 BETAT (4) = .0U0

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5125
PHI															
180.000	1.4180	.9720	.3680	.1240	.1290	.1520			.8490		-.0530	-.0530	-.0490	-.0450	-.0480

X/LB	.5875	.6826	.7580	.7869	.8283	.8846	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0380							-.1570		-.0540
40.000	-.0310	-.0440		.0310	-.0470	-.0650	-.0800			-.0850
70.000		-.0880	-.0710	-.0750	-.0830	-.0980	-.1030	-.0540		
90.000		-.0580	-.0700	-.0570	-.0500	-.0850	-.0830	-.0390		
105.000				-.0280	-.0350	-.0820	-.0800	-.0380		
110.000									-.0650	
120.000		-.0310	-.0340	.0380	.0120	-.0820	-.0920	-.0340	-.0280	
135.000				.1610	.1400	-.0640	-.0890	-.0330		
150.000		-.0370	-.0370	.0280	.0990	-.0730	-.0620	-.0210		
165.000		-.0340		.0240	.0890	.0190	.0000	-.0040		
180.000		-.0260	-.0290	-.0250						

MACH (3) = 3.5U2 BETAT (5) = 4.480

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5125
PHI															
.000	1.3830	.8900	.4310	.0550	.0250	-.0270			.0440		.0910	.0650	.0360	.0030	-.0130
20.000			.4210	.0580	.0250	-.0250			-.0080		.0870				
40.000			.4420	.0560	.0180	-.0300			-.0150		.0330	.0290	.0200	-.0020	-.0480
55.000			.4240	.0580	.0200	.0030			-.0010		-.0070				
75.000			.3730	.0590	.0090	.0120			.0180		-.0240	-.0350	-.0400	-.0310	-.0480
90.000		.8380	.3430	.0400	.0000	.0140			.0000		.0080	-.0420	-.0570	-.0440	-.0470
120.000			.3450	.0710	.0360	.0390			.0000		-.0230	-.0620	-.0680	-.0670	-.0470
142.000										.0000					
150.000			.3840	.0990	.0620	.0990			.0670		-.0350	-.0690	-.0730	-.0660	-.0600
157.000								.6180							
162.000									.5980						
165.000											-.0670	-.0710	-.0680	-.0550	-.0540
169.000									.6290						
172.000							.6300								
180.000	1.3830	.9080	.3810	.1380	.1200	.1390			.8210		-.0550	-.0610	-.0580	-.0620	-.0700

X/LB	.5875	.6826	.7580	.7869	.8283	.8846	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0440							-.1110		-.0700
40.000	-.0850	-.0870		-.0330	-.0290	-.0920	-.1180			-.0700

AMES 87-767 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB29)

MACH (3) = 3.502 BETAT (5) = 4.480

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0730	-.0880	-.0770	-.0720	-.1110	-.1120	-.0640		
90.000		-.0630	-.0750	-.0650	-.0630	-.0910	-.1020	-.0650		
105.000				-.0350	-.0450	-.0920	-.1080	-.0670		
115.000									.0180	
120.000		-.0440	-.0510	.0470	-.0420	-.1060	-.1140	-.0670	-.0600	
135.000				.1450	.1550	-.0680	-.0950	-.0470		
150.000		-.0390	-.0450	.0380	.1590	-.0400	-.0660	-.0210		
165.000		-.0550		-.0330	.0930	-.0010	-.0190	.0150		
180.000		-.0790	-.0740	-.0580						

MACH (3) = 3.502 BETAT (6) = 6.670

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3993	.5120
PHI															
.000	1.3520	.7960	.3780	.0420	.1040	.0050			.0970		.0700	.0400	.0310	.0150	-.0240
20.000			.3610	.0340	.0050	-.0170			.0450		.0760				
40.000			.3680	.0320	-.0080	-.0240			-.0190		.0080	-.0130	-.0310	-.0470	-.0660
55.000			.3450	.0330	-.0020	-.0080			-.0080		-.0100				
70.000			.3010	.0320	-.0170	-.0050			.0040		-.0120	-.0460	-.0470	-.0390	-.0510
90.000		.7530	.2810	.0150	-.0210	-.0040			-.0220		-.0160	-.0530	-.0640	-.0560	-.0510
120.000			.2950	.0460	.0160	.0130			-.0250		-.0270	-.0720	-.0770	-.0750	-.0520
142.000										-.0160					
150.000			.3230	.0840	.0660	.0840			.3130		-.0460	-.0790	-.0790	-.0750	-.0620
157.000								.5790							
162.000									.5770						
165.000											-.0760	-.0760	-.0680	-.0720	-.0800
169.000									.6090						
172.000							.5790								
180.000	1.3520	.9380	.3500	.1300	.1160	.1270			.7910		-.0510	-.0600	-.0690	-.0800	-.0930

X/LB	.5873	.6628	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0370							-.0780		-.0760
40.000	-.0750	-.1650		-.0430	-.0420	-.0670	-.0770			-.0590
70.000		-.0740	-.0810	-.0760	-.0710	-.0720	-.0780	-.0650		
90.000		-.0660	-.0720	-.0670	-.0600	-.0620	-.0710	-.0670		
115.000				-.0340	-.0520	-.0620	-.0780	-.0670		
115.000									.0300	
120.000		-.0420	-.0550	.0060	-.0540	-.0860	-.0840	-.0700	-.0650	
135.000				.2760	.2080	-.0460	-.0540	-.0530		
150.000		-.0680	-.0680	-.0250	.0250	-.0740	-.0550	-.0320		

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB20)

MACH (3) = 3.502 BETAT (6) = 6.670

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0820		-.0580	-.0010	-.0440	.0000	-.0470		
180.000		-.0920	-.0800	-.0650						

MACH (3) = 3.502 BETAT (7) = 8.870

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.3270	.7380	.3400	.0290	.0050	.0340			.1680		.0610	.0280	.0280	.0120	-.0300
20.000			.3070	.0130	.0020	.0280			.0780		.0340				
40.000			.3010	.0140	-.0240	-.0100			-.0310		-.0210	-.0500	-.0630	-.0740	-.0820
55.000			.2770	.0120	-.0250	-.0180			-.0140		-.0120				
70.000			.2360	-.0130	-.0370	-.0210			-.0110		-.0200	-.0430	-.0490	-.0520	-.0540
90.000		.6830	.2290	-.0160	-.0400	-.0220			-.0330		-.0380	-.0630	-.0660	-.0560	-.0510
125.000			.2520	.0250	-.0010	-.0050			-.0380		-.0440	-.0810	-.0850	-.0770	-.0590
142.000										-.0290					
150.000			.2900	.0670	.0560	.0640			.2740		-.0520	-.0840	-.0840	-.0760	-.0700
157.000								.5230							
162.000									.5620						
165.000											-.0800	-.0800	-.0760	-.0830	-.0930
169.000									.5890						
172.000							.5380								
180.000	1.3270	.9190	.3410	.1240	.1110	.1180			.7700		-.0480	-.0580	-.0780	-.0830	-.1050

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0250							-.1330		-.0810
40.000	-.0820	-.0680		-.0430	-.0520	-.1200	-.1300			-.0700
70.000		-.0730	-.0780	-.0710	-.0690	-.1120	-.1180	-.0600		
90.000		-.0600	-.0680	-.0630	-.0520	-.1030	-.1120	-.0630		
105.000				-.0370	-.0520	-.1070	-.1250	-.0690		
110.000									-.0230	
120.000		-.0470	-.0600	.0610	-.0060	-.1250	-.1300	-.0720	-.0610	
135.000				.1110	.0440	-.1060	-.1010	-.0450		
150.000		-.0920	-.0980	-.0800	-.0690	-.1310	-.1280	-.0735		
165.000		-.1030		-.0830	-.0710	-.0960	-.0960	-.0650		
180.000		-.1020	-.0950	-.0830						

AMES 67-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB21) (10 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

MACH (1) = 2.499 BETAT (1) = -8.390

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2480	.9560	.4630	.0410	.0680	.1320			.0490		.0390	-.0090	-.0170	-.0380	-.0470
20.000			.5230	.0960	.0710	.0700			.0670		.0010				
40.000			.6650	.1970	.1520	.1940			.1050		.0350	-.0200	-.0260	-.0220	.0920
55.000			.7570	.2450	.2080	.3580			.2630		.1650				
75.000			.6920	.2400	.1780	.3720			.2950		.2030	.0670	-.0070	-.0170	-.0040
90.000		1.0910	.6420	.2070	.1630	.3670			.3140		.2910	.0610	-.0230	-.0360	-.0320
120.000			.5470	.1850	.1550	.2280			.4720		.1650	.0060	-.0430	-.0760	-.0750
142.000										.1390					
150.000			.4450	.1280	.1230	.2270			.6280		-.0050	-.0420	-.0380	-.0500	-.0720
157.000								.6650							
162.000									.6370						
165.000											-.0590	.0130	.0010	-.0380	-.0770
169.000									.5310						
172.000							.5680								
180.000	1.2480	.8090	.2870	.0900	.0830	.1910			.6690		-.1260	-.1140	-.1600	-.1710	-.1540

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0210							-.1150		-.0870
40.000	.1090	.0960		.2190	.1780	.1310	.0240			-.1200
70.000		-.0260	-.0460	-.0430	-.0560	.0060	-.0210	-.0270		
90.000		-.0240	-.0350	-.0250	.0710	.0230	.0260	.0000		
105.000				.0950	.1400	.0870	.0140	-.0100		
110.000									.0350	
120.000		-.0670	-.0750	.4260	.3140	.0530	.0080	-.0050	-.0120	
135.000				.1020	.1330	-.1030	-.1250	-.1050		
150.000		-.0860	-.0820	-.0310	-.0430	-.1370	-.1290	-.1150		
165.000		-.0680		.0010	.0310	-.0360	.0640	-.0120		
180.000		-.1300	-.1180	-.0900						

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB21)

MACH (1) = 2.499 BETAT (2) = -6.280

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2840	.9260	.5130	.0980	.0770	.1960			.1300		.0570	.0390	.0150	-.0410	-.0560
25.000			.5550	.1400	.1400	.0500			.0940		.0280				
40.000			.6590	.2510	.1980	.1430			.0740		.0250	-.0170	-.0340	-.0220	.0650
55.000			.6830	.2250	.1990	.3010			.2210		.1320				
70.000			.6480	.2220	.1430	.3220			.2490		.1850	.0450	-.0240	-.0460	-.0340
90.000		1.0490	.5880	.1700	.1280	.2470			.2750		.2470	.0390	-.0390	-.0580	-.0590
125.000			.5460	.1530	.1280	.1940			.3670		.1620	.0050	-.0540	-.0880	-.0830
142.000										.0780					
150.000			.4260	.1150	.1130	.1810			.6090		-.0260	-.0360	-.0530	-.0630	-.0830
157.000								.6890							
162.000									.6110						
165.000											-.0810	-.0200	-.0180	-.0500	-.0830
169.000									.5280						
172.000							.6190								
180.000	1.2840	.8240	.2960	.0900	.0660	.1570			.6950		-.1270	-.1240	-.1040	-.1520	-.1320

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0420							-.1000		-.0780
40.000	.0790	.0620		.1860	.1370	.0980	-.0080			-.1270
75.000		-.0550	-.0700	-.0650	-.0710	-.0120	-.0360	-.0450		
90.000		-.0480	-.0550	-.0480	.0420	.0070	.0040	-.0180		
105.000				.0630	.1010	.0600	.0000	-.0300		
115.000									.0110	
120.000		-.0820	-.0850	.3570	.2520	.0610	-.0080	-.0260	-.0290	
135.000				.0990	.1330	-.0870	-.1180	-.0930		
150.000		-.0890	-.0870	-.0310	-.0230	-.1180	-.1130	-.1070		
165.000		-.0960		-.0150	.0390	.0110	.0660	-.0140		
180.000		-.1140	-.1040	-.0760						

MACH (1) = 2.499 BETAT (3) = -4.170

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3400	.9400	.5170	.1020	.0750	-.0210			.2020		.1160	.0260	.0260	-.0460	-.0860
25.000			.5390	.1430	.1340	-.0060			.1450		.0610				
40.000			.6130	.1790	.1920	.1000			.0950		.0380	-.0010	-.0150	-.0400	.0400
55.000			.6260	.1770	.1660	.2390			.1890		.1140				
70.000			.6010	.1780	.1550	.2570			.2160		.1590	.0250	-.0410	-.0610	-.0590
90.000		1.1280	.5360	.1230	.0880	.1510			.2540		.2110	.0180	-.0520	-.0680	-.0790
125.000			.4630	.1230	.0970	.1510			.2730		.1370	-.0140	-.0610	-.0860	-.0940

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (RBNB21)

MACH (1) = 2.499 BETAT (3) = -4.17

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0370					
150.000			.4510	.0990	.1100	.1630			.5720		-.0520	-.0540	-.0690	-.0690	-.0940
157.000								.6730							
162.000									.5820						
165.000											-.1000	-.0720	-.0370	-.0570	-.0910
169.000									.5350						
172.000							.6210								
180.000	1.3460	.8340	.2910	.0900	.0080	.1370			.7180		-.1320	-.1280	-.1010	-.1290	-.1130

X/LB	.5873	.6626	.7380	.7869	.8263	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0710							-.0990		-.0650
40.000	.0420	.0290		.1430	.0950	.0570	-.0430			-.1330
70.000		-.0780	-.0850	-.0800	-.0840	-.0430	-.0640	-.0640		
90.000		-.0670	-.0740	-.0650	.0160	-.0230	-.0280	-.0360		
105.000				.0400	.0690	.0320	-.0280	-.0450		
115.000									.0160	
120.000		-.0890	-.0880	.2770	.2150	-.0040	-.0390	-.0360	-.0420	
135.000				.1320	.1540	-.0790	-.1110	-.0760		
150.000		-.0830	-.0730	.0010	.0150	-.1080	-.0920	-.0610		
165.000		-.0810		.0060	.0550	.0230	.0320	-.0270		
180.000		-.0860	-.0840	-.0610						

MACH (1) = 2.499 BETAT (4) = .60

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3830	.9550	.4940	.1070	.0480	-.0270			.2230		.1030	.0840	.0530	-.0120	-.0690
20.000			.4840	.1120	.0770	-.0270			.2060		.1510				
40.000			.5210	.1050	.1600	.0240			.1760		.0580	.0220	.0110	-.0230	.0170
55.000			.5190	.1050	.0920	.0500			.1410		.0970				
70.000			.4260	.1050	.0310	.0650			.1290		.1350	-.0010	-.0650	-.0470	-.0550
90.000		.9430	.4320	.0510	.0190	.0700			.1040		.1520	-.0030	-.0630	-.0540	-.0660
120.000			.3800	.0720	.0430	.0730			.1570		.1490	-.0590	-.0420	-.0580	-.0660
142.000										-.0250					
150.000			.3580	.0770	.0750	.1170			.4770		-.0850	-.1100	-.0630	-.0420	-.0710
157.000								.6370							
162.000									.5290						
165.000											-.1270	-.1270	-.0670	-.0270	-.0590
169.000									.5370						
172.000							.6980								

AMES 97-747 IA9 OEA + S3 + T9 ORBITER FUSELAGE (FBNB21)

MACH (1) = 2.499 BETA (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0482	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3880	.9380	.5040	.1980	.1020	.1420			.7240		-.1440	-.1230	-.0820	-.0240	-.0470
X/LB	.5073	.6020	.7380	.7980	.8203	.8848	.9202	.9639	1.0015	1.0392					
PHI															
.000	-.0170							-.0680		-.0540					
40.000	.0130	.0180		.0330	-.0160	.0050	-.0010			-.0720					
70.000		-.0880	-.1480	-.1230	-.1210	-.0570	-.0770	-.0870							
90.000		-.0830	-.0810	-.0480	-.0570	-.0390	-.0560	-.0880							
110.000				-.0120	-.0280	-.0190	-.0320	-.0720							
115.000									.0000						
130.000															
140.000		-.0730	-.0590	.0190	.0420	-.0180	-.0450	-.0940	-.0560						
150.000				.0170	.0310	-.0170	-.0540	-.0160							
160.000		-.0720	-.0480	.0390	.0810	-.0240	-.0550	.0140							
180.000		-.0870		.0270	.0130	.0810	.0450	-.0390							
200.000		-.0830	-.0690	-.0940											

MACH (1) = 2.499 BETA (5) = 4.31

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0482	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3970	.9420	.4880	.1870	.0450	.0480			.1870		.1140	.0480	.0200	-.0450	-.0810
30.000			.4680	.0980	.0290	.0140			.2120		.1120				
40.000			.4550	.0780	.0680	-.0130			.1230		.0570	-.0210	-.0190	-.0630	-.0490
50.000			.4240	.0780	.0350	-.0180			.0400		.0730				
70.000			.3080	.0330	-.0210	-.0210			.0080		.0120	-.0130	-.0670	-.0910	-.1060
90.000		.8380	.3210	-.0140	-.0240	.0210			.0180		.0380	-.0190	-.0650	-.0940	-.1090
120.000			.2850	.0160	-.0050	.0330			.0370		-.0190	-.0110	-.0930	-.0940	-.0820
142.000										-.0740					
150.000			.2930	.0380	.0430	.0930			.0730		-.0140	-.0410	-.0270	-.0720	-.0510
157.000								.5090							
162.000									.4910						
165.000											-.0450	-.0480	-.0210	-.0730	-.0530
169.000									.5290						
172.000							.6280								
180.000	1.3970	.8360	.2850	.0810	.0080	.1280			.7020		-.1380	-.1330	-.1010	-.1270	-.1140
X/LB	.5073	.6020	.7380	.7980	.8203	.8848	.9202	.9639	1.0015	1.0392					
PHI															
.000	-.0710							-.1020		-.0630					
40.000	-.0180	.0740		-.0320	-.0180	-.0780	-.1470			-.0770					

AMES 87-7J? IA9 OEA + S3 + T9 ORBITER FUSELAGE (P9NB21)

MACH (1) = 2.499 BETAT (5) = 4.31)

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.5825	.7389	.7859	.8283	.8848	.9282	.9539	1.0015	1.0392
PHI										
7.000		-.0877	-.1140	-.0980	-.0740	-.0980	-.1125	-.0980		
9.000		-.0780	-.0850	-.0540	-.0390	-.0780	-.0960	-.0660		
115.000				-.0230	-.0400	-.0750	-.0990	-.0910		
111.000									-.0530	
12 .000		-.0240	-.0380	.0080	.0220	-.0730	-.0990	-.0620	-.0530	
135.000				.2650	.2590	-.0740	-.0890	-.0460		
15).000		-.0780	-.0780	.0770	.2210	-.0340	-.0810	-.0250		
165.000		-.0780		-.0190	.1520	.0300	-.0220	-.0250		
18).000		-.0890	-.0880	-.0590						

MACH (1) = 2.498 BETAT (6) = 6.44)

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1526	.1581	.1732	.1958	.2259	.2711	.3220	.3953	.5120
PHI															
.000	1.3180	.9330	.9170	.8660	.8620	.2180			.1110		.0490	.0340	.0080	-.0450	-.0560
2).000			.4570	.0920	.0250	-.0270			.1930		.0520				
4).000			.4280	.0730	.0380	-.0690			.2300		.0130	-.0410	-.0590	-.1010	-.0740
55.000			.3740	.0710	-.0270	-.0750			-.0110		.0480				
7).000			.3080	.0250	-.0830	-.0620			.0930		.0720	-.0250	-.0720	-.1000	-.1160
9).000		.7630	.2580	-.0410	-.0850	-.0450			.0150		.0180	-.0430	-.0730	-.1010	-.1120
12).000			.2490	-.0260	-.0720	-.0420			.0330		-.0410	-.0230	-.0110	-.0930	-.0770
142.000										-.0910					
15).000			.2870	.0250	-.0110	.0210			.0210		-.0220	-.0590	-.0350	-.0810	-.0620
157.000								.4850							
182.000									.4890						
185.000											-.0560	-.0510	-.0270	-.0150	-.0760
199.000									.0210						
172.000							.5310								
18).000	1.3180	.8280	.2820	.0790	.0450	.0090			.0850		-.0130	-.0370	-.0110	-.0350	-.0350

X/LB	.5873	.5825	.7389	.7859	.8283	.8848	.9282	.9539	1.0015	1.0392
PHI										
.000	-.0880							-.1110		-.0810
4).000	-.0190	.0380		-.0710	-.0210	-.0620	-.0990			-.0080
7).000		-.0970	-.0170	-.0270	-.0290	-.0910	-.1080	-.1020		
9).000		-.0770	-.0920	-.0220	-.0370	-.0750	-.0930	-.0920		
115.000				-.0170	-.0220	-.0750	-.0920	-.0980		
111.000									-.0930	
12).000		-.0870	-.0790	-.0890	-.0430	-.0190	-.0120	-.0080	-.0760	
139.000				.0250	.0420	-.0120	-.0890	-.0720		
15).000		-.0810	-.0080	-.0120	.0410	-.0120	-.0730	-.0410		

AMES 87-757 IA9 ORA + S3 + T9 ORBITER FUSELAGE (RUN821)

MACH (1) = 2.490 BETAT (6) = 6.440

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.3873	.6826	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
165.000		-.1402		-.2486	-.3180	-.3411	-.3271	-.3430		
180.000		-.1140	-.1950	-.2490						

MACH (1) = 2.489 BETAT (7) = 8.575

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.1444	.1675	.2180	.2339	.2642	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.2420	.8875	.4180	.3360	.3710	.1520			.3410		.1280	-.3120	-.3220	-.3390	-.3410
20.000			.3780	.3250	.3510	.1390			.3080		.2180				
40.000			.3530	.3040	.3280	-.3680			.3630		-.3630	-.3780	-.3930	-.4210	-.4530
55.000			.3180	.2801	-.3750	-.3820			-.3460		-.3210				
70.000			.2380	-.3290	-.4170	-.4670			-.3930		.1480	-.3320	-.3850	-.4180	-.4180
90.000		.8810	.2150	-.3680	-.4130	-.4710			-.3930		.1280	-.3640	-.3820	-.4130	-.4050
125.000			.2590	-.3330	-.3880	-.3850			-.3920		-.3490	-.4380	-.4220	-.3990	-.3780
142.000										-.4190					
150.000			.2380	.2130	-.3220	.1240			.2880		-.4330	-.4650	-.4470	-.3810	-.3810
157.000								.4240							
162.000									.4620						
165.000											-.4720	-.4880	-.4380	-.4520	-.4250
180.000									.5240						
172.000							.4460								
180.000	1.2420	.8210	.2770	.2740	.3440	.1140			.6590		-.4290	-.4250	-.4170	-.4790	-.4840

X/LB	.3873	.6826	.7380	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.1420							-.1280		-.3910
40.000	-.1470	-.3110		-.3580	-.3430	-.4210	-.4240			-.3920
70.000		-.3930	-.4110	-.4110	-.4080	-.4980	-.4140	-.4420		
90.000		-.4040	-.4040	-.3720	-.3680	-.3680	-.4040	-.4070		
105.000				-.4240	-.4990	-.4990	-.4160	-.4990		
115.000									-.3870	
120.000		-.4080	-.4030	.3550	.3090	-.4290	-.4240	-.4080	-.4080	
135.000				.3570	.2440	-.4250	-.4910	-.4080		
150.000		-.4110	-.4150	-.3570	-.3630	-.4230	-.4210	-.4020		
165.000		-.4180		-.3710	.3160	-.3780	-.3740	-.4010		
180.000		-.4310	-.4210	-.4980						

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AMES 87-747 IAS ORA + 33 + 79 ORBITER FUSELAGE (FBNB21)

MACH (2) = 2.399 BETA (1) = -8.55

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/L	.0000	.0075	.0198	.0339	.0492	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3220	.3953	.5120
PHI															
.000	1.2320	.7570	.3880	.0130	.0080	.0390			.1180		.0140	.0230	-.0040	-.0290	-.0310
2.000			.4490	.0810	.0110	.0220			.1890		.0380				
4.000			.5750	.0930	.0560	.0940			.1820		.0640	.0290	-.0220	-.0220	.0380
5.000			.6330	.1450	.1540	.0390			.3110		.2120				
7.000			.6590	.1980	.1560	.1330			.3280		.2540	.0120	.0380	.0080	.0000
9.000		1.1940	.6420	.2140	.1420	.1260			.2220		.3190	.0110	.0220	-.0370	-.0170
12.000			.5420	.2190	.1550	.2000			.2990		.1940	.0530	.0320	-.0350	-.0390
142.000										.2180					
15.000			.4440	.2410	.1240	.0220			.6340		-.0430	-.0190	-.0170	-.0210	-.0400
157.000								.5780							
182.000									.6350						
165.000											-.0310	-.0170	.0050	-.0320	-.0390
199.000									.5590						
172.000							.5940								
18.000	1.2320	.9120	.2940	.0190	.0050	.0120			.6380		-.0890	-.0880	-.1120	-.1190	-.1260

X/L	.5073	.6828	.7380	.7859	.8283	.8648	.9052	.9539	1.0015	1.0392
PHI										
.000	-.0350							-.0990		-.0890
4.000	.0310	.0790		.0350	.0630	.0330	.1420			-.0740
7.000		-.0290	-.0330	-.0360	-.0190	.0340	-.0970			
9.000		-.0220	-.0390	-.0370	.0370	.0260	.0310			
115.000				.0430	.0490	.0190	.0220			
11.000								.0890		
12.000		-.0180	-.0480	.0290	.0220	.0430	.0280	.0140		
135.000				.0110	.0140	-.0260	-.0790	-.0730		
15.000		-.0580	-.0620	-.0770	-.0190	-.0120	-.0530	-.0690		
195.000		-.0550		-.0110	.0130	-.0180	.0390	-.0150		
18.000		-.0110	-.1130	-.0720						

MACH (2) = 2.399 BETA (2) = -4.24

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/L	.0000	.0075	.0198	.0339	.0492	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.3220	.3953	.5120
PHI															
.000	1.2880	.8230	.4140	.0460	.0130	-.0270			.1810		.0120	.0530	.0540	.0040	-.0410
2.000			.4570	.0720	.0320	-.0310			.1990		.0490				
4.000			.5430	.0710	.0850	.0080			.1470		.0690	.0390	-.0190	-.0240	.0000
5.000			.5570	.0910	.1240	.0290			.2220		.1530				
7.000			.5530	.0290	.0870	.0170			.1350		.1090	.0470	.0000	-.0290	-.0390
9.000		1.0310	.5360	.0390	.0090	.0160			.1220		.2140	.0170	.0000	-.0280	-.0450
12.000			.4770	.0240	.0130	.0130			.1080		.0740	.0000	-.0150	-.0320	-.0570

AMES 87-737 IA9 OEA + S3 + T9 ORBITER FUSELAGE (FB1821)

MACH (2) = 2.999 BETAT (2) = -4.24

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
142.000										.0481					
150.000			.4150	.1400	.1150	.1450			.5280		-.0310	-.0490	-.0510	-.0470	-.0620
157.000								.6440							
162.000									.5770						
165.000											-.0570	-.0620	-.0550	-.0320	-.0490
169.000									.5490						
172.000							.8090								
180.000	1.2880	.8510	.3670	.1460	.0990	.1150			.7240		-.0850	-.0920	-.0880	-.0850	-.1000

X/LB	.9873	.9824	.7380	.7899	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0875							-.0920		-.0650
40.000	.0330	.0310		.1350	.0980	.0430	-.0040			-.0510
70.000		-.0880	-.0830	-.0780	-.0650	-.0330	-.0410	-.0480		
90.000		-.0680	-.0730	-.0660	-.0130	-.0140	-.0180	-.0190		
109.000				-.0070	.0110	-.0120	-.0040	-.0150		
110.000									.0270	
120.000		-.0730	-.0770	.1020	.1170	.0110	-.0110	-.0120	-.0210	
135.000				.0880	.1220	-.0820	-.0880	-.0780		
150.000		-.0720	-.0720	-.0230	-.0070	-.0960	-.0890	-.0730		
165.000		-.0700		-.0150	.0130	-.0040	.0070	-.0320		
180.000		-.0800	-.0780	-.0660						

MACH (2) = 2.999 BETAT (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5125
PHI															
.000	1.3110	.9400	.4430	.0540	.0580	-.0360			.0570		.1590	.1140	.1140	.0180	-.0420
20.000			.4650	.0680	.0560	-.0350			.0680		.1400				
40.000			.5210	.0680	.0580	-.0250			.0320		.0940	.0390	.0210	-.0040	-.0380
55.000			.5230	.0760	.0550	.0450			.0330		.1260				
70.000			.4810	.0840	.0340	.0530			.0590		.1020	.0410	-.0180	-.0450	-.0610
90.000		.9480	.4280	.0830	.0330	.0580			.0430		.0640	.0160	-.0190	-.0480	-.0570
120.000			.3990	.0910	.0580	.0750			.0180		.0250	-.0570	-.0610	-.0520	-.0740
142.000										.0020					
150.000			.3850	.0990	.0830	.1110			.0440		-.0590	-.0760	-.0830	-.0640	-.0520
157.000								.0270							
162.000									.0290						
165.000											-.0780	-.0880	-.0820	-.0680	-.0480
169.000									.0460						
172.000							.0810								

AMES 87-767 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB21)

MACH (2) = 2.999 BETAT (3) = .0[illegible]

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3130	.8570	.3120	.0820	.0970	.1260			.7440		-.0910	-.0870	-.0820	-.0700	-.0420

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0730							-.1120		-.0580
4.000	-.0550	-.0430			.0430	.0110	.0000	-.0640		-.1120
7.000		-.0690	-.2100	-.0950	-.0700	-.0700	-.0650	-.0700		
90.000		-.0850	-.1900	-.0580	-.0500	-.0650	-.0590	-.0530		
105.000				-.0380	-.0370	-.0550	-.0510	-.0500		
110.000									.0210	
120.000		-.0730	-.0740	.0150	.0180	-.0560	-.0450	-.0340	-.0370	
139.000				.0980	.1190	-.0570	-.0720	-.0240		
150.000		-.0550	-.0590	.0290	.2010	-.0540	-.0410	-.0170		
165.000		-.0520		-.0120	.0850	.0480	.0190	-.0240		
180.000		-.0440	-.0500	-.0470						

MACH (2) = 2.999 BETAT (4) = 4.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2800	.9150	.4160	.1420	.0450	-.0330			.1450		.0900	.0580	.0640	-.0010	-.0[illegible]
2.000			.4180	.1430	.0410	-.0320			.0990		.1190				
4.000			.4380	.1430	.0240	-.0240			.0210		.0670	.0260	.0190	-.0420	-.0760
99.000			.4210	.1420	.0230	-.0250			-.0040		.0310				
7.000			.3710	.0410	-.0160	.0070			.0120		.0120	-.0090	-.0290	-.0580	-.0790
9.000		.7830	.3250	.0220	-.0130	.0110			-.0090		.0120	-.0550	-.0450	-.0540	-.0760
120.000			.2980	.0400	.0110	.0270			.0000		-.0210	-.0830	-.0900	-.0710	-.0640
142.000										-.0340					
150.000			.3040	.0640	.0520	.0810			.0340		-.0680	-.0990	-.0980	-.0810	-.0450
157.000								.5660							
162.000									.5110						
165.000											-.1000	-.0920	-.0920	-.0810	-.0580
169.000									.5390						
172.000							.5740								
180.000	1.2850	.8520	.3010	.1000	.0890	.1120			.7120		-.0990	-.0900	-.0890	-.0880	-.1040

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0850							-.0780		-.0610
4.000	-.0870	-.1230		-.0650	-.0230	-.0410	-.0920			-.0570

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (PBNB21)

MACH (2) = 2.999 BETAT (4) = 4.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.0990	-.0980	-.0880	-.0770	-.0680	-.0940	-.0790		
90.000		-.0820	-.0870	-.0720	-.0690	-.0490	-.0630	-.0680		
105.000				-.0470	-.0610	-.0500	-.0640	-.0670		
110.000									.0290	
120.000		-.0630	-.0680	.0390	-.0230	-.0500	-.0640	-.0530	-.0470	
135.000				.1380	.1500	-.0490	-.0630	-.0530		
150.000		-.0490	-.0570	.0450	.1710	.0440	-.0440	-.0450		
165.000		-.0470		-.0310	.0930	.0470	-.0110	-.0060		
180.000		-.0840	-.0760	-.0580						

MACH (2) = 2.999 BETAT (5) = 8.730

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0475	.0158	.0339	.0662	.1355	.1506	.1581	.1732	.1958	.2259	.2611	.3266	.3953	.5125
PHI															
.000	1.2215	.8140	.3660	.0170	.0030	.0660			.1010		.0190	.0240	-.0050	-.0330	-.0340
20.000			.3400	.0160	-.0010	-.0140			.0690		.0010				
40.000			.3260	.0120	-.0230	-.0460			.0510		-.0210	-.0580	-.0660	-.0940	-.1020
55.000			.3120	.0050	-.0400	-.0450			-.0230		-.0150				
70.000			.2550	.0020	-.0550	-.0300			-.0210		.0070	-.0360	-.0430	-.0700	-.0840
90.000		.8420	.2140	-.0330	-.0550	-.0300			-.0530		-.0250	-.0630	-.0720	-.0560	-.0782
125.000			.2180	-.0030	-.0240	-.0240			-.0480		-.0430	-.0150	-.0110	-.0920	-.0540
142.000										-.0660					
150.000			.2490	.0360	.0290	.0230			.2480		-.0850	-.2160	-.0130	-.0930	-.0760
157.000								.4470							
162.000									.4780						
165.000											-.1170	-.1130	-.0920	-.1120	-.1250
169.000									.5050						
172.000							.4580								
180.000	1.2215	.8190	.2890	.0910	.0830	.0990			.6520		-.0820	-.0330	-.0190	-.1160	-.1330

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0370							-.0950		-.0830
40.000	-.0990	-.0510		-.0420	-.0790	-.0800	-.0870			-.0760
70.000		-.0990	-.1960	-.0920	-.0840	-.0830	-.0930	-.0850		
90.000		-.0830	-.0850	-.0780	-.0670	-.0750	-.0860	-.0830		
105.000				-.0460	-.0600	-.0720	-.0880	-.0850		
110.000									-.0420	
120.000		-.0750	-.0830	.0240	-.0590	-.0980	-.0990	-.0830	-.0720	
135.000				.2290	.1810	-.0680	-.0780	-.0660		
150.000		-.1180	-.1090	-.0680	-.0810	-.1030	-.1030	-.0750		

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (RBNB21)

MACH (2) = 2.999 BETAT (5) = 8.730

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8293	.8848	.9262	.9639	1.0015	1.0392
PHI										
169.000		-.1190		-.0830	-.0550	-.0810	-.0710	-.0760		
180.000		-.1160	-.1060	-.0820						

MACH (3) = 3.502 BETAT (1) = -8.710

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.2400	.7450	.3710	.0350	.0130	.0310			.1640		.0500	.0190	.0330	.0010	-.0340
20.000			.4210	.0690	.0170	.0580			.1990		.0610				
40.000			.5490	.0590	.0940	.1530			.2540		.1230	.0760	.0060	-.0280	.0240
55.000			.5210	.1220	.1580	.1960			.3450		.2440				
70.000			.5580	.2170	.1530	.1830			.1790		.2780	.1430	.0560	.0320	.0120
90.000		1.1110	.5540	.2260	.1480	.1810			.1960		.2810	.1370	.0590	.0190	-.0030
120.000			.5570	.2040	.1590	.1960			.2380		.1350	.0450	.0310	-.0110	-.0330
142.000										.1170					
150.000			.4460	.1510	.1290	.1730			.5910		.0170	-.0110	-.0110	-.0120	-.0260
157.000								.6660							
162.000									.6400						
165.000											-.0060	-.0040	-.0130	.0120	-.0170
169.000									.5740						
172.000							.6280								
180.000	1.2410	.8240	.3020	.1220	.0960	.1020			.6860		-.0460	-.0580	-.0780	-.0740	-.0950

X/LB	.5873	.6626	.7380	.7869	.8293	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0250							-.1210		-.0750
40.000	.0330	.0730		.1900	.1490	.0510	.0140			-.0470
70.000		-.0220	-.0460	-.0330	-.0260	-.0200	-.0310	.0090		
90.000		-.0190	-.0320	-.0280	.0280	.0090	-.0050	.0410		
105.000				.0180	.0580	.0780	.0290	.0450		
111.000									.0600	
120.000		-.0480	-.0300	.2550	.1870	.0430	.0150	.0460	.0360	
135.000				.1130	.1500	-.0800	-.0890	-.0440		
150.000		-.0420	-.0480	-.0180	-.0020	-.1170	-.1070	-.0460		
165.000		-.0410		-.0120	.0110	-.0670	-.0070	-.0060		
180.000		-.0940	-.0850	-.0700						

AMES 87-707 IA9 02A + 33 + T9 ORBITER FUSELAGE (FBN821)

MACH (3) = 3.502 BETAT (2) = -6.51

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2780	.8580	.4110	.0480	.0180	-.0260			.0920		.0550	.0240	.0060	.0130	-.0250
20.000			.4720	.0790	.0200	.0250			.1370		.0690				
40.000			.5710	.0880	.0870	.0910			.2260		.1030	.0680	.0150	-.0240	.0140
55.000			.5930	.1070	.1350	.1310			.3250		.2040				
70.000			.6050	.1690	.1220	.1410			.2540		.2540	.1190	.0450	.0190	-.0050
90.000		1.0710	.5970	.1870	.1180	.1390			.1490		.2180	.1160	.0450	.0070	-.0160
120.000			.5210	.1560	.1340	.1580			.1730		.1680	.0160	.0160	-.0150	-.0410
142.000										.1920					
150.000			.4350	.1420	.1220	.1500			.5520		.0830	-.0180	-.0270	-.0220	-.0350
157.000								.6530							
162.000									.6070						
165.000											-.0130	-.0240	-.0270	-.0160	-.0220
169.000									.5650						
172.000							.8360								
180.000	1.2780	.8500	.3130	.1410	.1120	.1570			.7050		-.0680	-.0590	-.0660	-.0720	-.0990

X/LB	.5873	.6826	.7380	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392
PHI										
.000	-.0320							-.1120		-.0710
40.000	.0490	.0330		.1660	.1270	.0240	-.0430			-.0580
70.000		-.0390	-.0680	-.0470	-.0410	-.0420	-.0480	-.0110		
90.000		-.0550	-.0480	-.0430	-.0410	-.0220	-.0250	.0170		
105.000				-.0010	.0220	.0210	.0200	.0220		
110.000									.0350	
120.000		-.0530	-.0570	.1810	.1330	-.0050	-.0110	.0210	.0160	
135.000				.0930	.1300	-.0850	-.0950	-.0440		
150.000		-.0480	-.0550	-.0250	-.0060	-.0140	-.0260	-.0470		
165.000		-.0500		-.0230	.0050	-.0630	-.0150	-.0150		
180.000		-.0870	-.0880	-.0620						

MACH (3) = 3.502 BETAT (3) = -4.32

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3030	.9280	.4450	.0630	.0390	-.0260			.0630		.0960	.0510	.0810	.0310	-.0150
20.000			.4850	.0850	.0370	-.0270			.0250		.0830				
40.000			.5820	.0820	.0740	.0540			.1750		.0950	.0540	.0100	-.0130	-.0160
55.000			.5970	.1060	.1110	.0980			.1220		.1720				
70.000			.5810	.1440	.0980	.1000			.1140		.1280	.0950	.0310	-.0010	-.0220
90.000		1.0250	.5420	.1520	.0920	.0990			.1040		.1340	.0730	.0280	-.0060	-.0290
120.000			.4810	.1550	.1120	.1280			.1250		.0680	-.0110	-.0170	-.0230	-.0460

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB21)

MACH (3) = 3.502 BETAT (4) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3030	.8780	.3160	.1030	.0840	.1220			.7490		-.0650	-.0630	-.0640	-.0580	-.0540

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0450							-.0650		-.0440
40.000	-.0430	-.0300		.0250	-.0090	-.0270	-.0410			-.0820
70.000		-.0750	-.0850	-.0830	-.0720	-.0580	-.0510	-.0590		
90.000		-.0730	-.0810	-.0680	-.0560	-.0530	-.0500	-.0480		
105.000				-.0490	-.0470	-.0530	-.0420	-.0440		
110.000									-.0130	
120.000		-.0650	-.0670	.0180	.0210	-.0530	-.0480	-.0310	-.0330	
135.000				.0660	.0860	-.0530	-.0590	-.0380		
150.000		-.0500	-.0540	.0130	.0670	-.0530	-.0350	-.0230		
165.000		-.0460		-.0230	.0460	.0270	.0160	-.0190		
180.000		-.0400	-.0420	-.0390						

MACH (3) = 3.502 BETAT (5) = 4.470

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2980	.9230	.4310	.0570	.0380	-.0300			.0700		.0850	.0450	.0690	.0260	-.0210
20.000			.4260	.0630	.0190	-.0290			-.0130		.1220				
40.000			.4470	.0630	.0220	-.0260			-.0170		.0550	.0220	.0070	-.0160	-.0500
55.000			.4370	.0630	.0210	-.0130			-.0070		.0010				
70.000			.3790	.0630	.0050	.0000			.0690		-.0100	-.0330	-.0360	-.0420	-.0540
90.000		.7890	.3240	.0360	.0050	.0110			-.0010		.0060	-.0440	-.0590	-.0390	-.0570
120.000			.3030	.0540	.0240	.0290			-.0040		-.0130	-.0630	-.0710	-.0670	-.0490
142.000										-.0110					
150.000			.3100	.0770	.0610	.0770			.3120		-.0440	-.0720	-.0770	-.0700	-.0570
157.000								.5400							
162.000									.5180		-.0720	-.0730	-.0730	-.0650	-.0630
165.000									.5480						
169.000							.5460								
172.000															
180.000	1.2360	.8880	.3110	.0760	.0920	.1100			.7180		-.0630	-.0650	-.0710	-.0730	-.0820

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0480							-.0850		-.0620
.000	-.0650	-.0520		-.0240	-.0210	-.0450	-.0860			-.0630

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-PCT IA9 OBA + S3 + T9 ORBITER FUSELAGE (PBNB21)

MACH (3) = 3.502 BETAT (5) = 4.47

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5973	.6625	.7380	.7869	.8283	.8848	.9252	.9639	1.0015	1.0392
PHI										
75.000		-.077	-.088	-.079	-.073	-.089	-.088	-.065		
90.000		-.072	-.077	-.071	-.071	-.068	-.087	-.062		
105.000				-.053	-.051	-.068	-.089	-.065		
110.000									.014	
120.000		-.052	-.058	.035	-.059	-.083	-.087	-.064	-.021	
135.000				.072	.096	-.063	-.068	-.055		
150.000		-.045	-.051	.022	.040	-.021	-.051	-.043		
165.000		-.052		-.037	.155	.011	-.036	-.043		
180.000		-.079	-.071	-.051						

MACH (3) = 3.502 BETAT (6) = 6.67

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0073	.0188	.0339	.0562	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.259	.852	.411	.054	.011	-.024			.193		.047	.017	.000	.012	-.032
2.000			.384	.046	.008	-.027			.143		.066				
4.000			.387	.046	.001	-.029			-.022		.034	-.005	-.024	-.045	-.069
55.000			.369	.043	-.001	-.027			-.016		-.005				
7.000			.312	.042	-.015	-.014			-.004		-.020	-.036	-.042	-.048	-.057
9.000		.710	.257	.011	-.018	-.009			-.019		-.021	-.033	-.050	-.048	-.059
120.000			.254	.032	.005	.046			-.030		-.029	-.072	-.060	-.075	-.069
142.000										-.029					
150.000			.282	.063	.047	.051			.266		-.052	-.080	-.081	-.076	-.063
157.000								.503							
162.000									.509						
165.000											-.078	-.080	-.075	-.077	-.083
169.000									.520						
172.000							.506								
180.000	1.259	.849	.305	.086	.091	.097			.699		-.057	-.066	-.078	-.084	-.100

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.034							-.085		-.078
4.000	-.078	-.053		-.037	-.036	-.062	-.080			-.054
7.000		-.079	-.088	-.079	-.074	-.065	-.082	-.067		
9.000		-.073	-.079	-.072	-.066	-.067	-.078	-.069		
105.000				-.052	-.056	-.077	-.085	-.071		
110.000									-.027	
120.000		-.053	-.068	.033	-.055	-.088	-.091	-.073	-.066	
135.000				.225	.173	-.069	-.087	-.055		
150.000		-.068	-.072	-.029	.017	-.082	-.078	-.044		

AMES 87-7(7 IA9 OEA + S3 + T9 ORBITER FUSELAGE (9BNB21)

MACH (3) = 3.5(2 BETAT (6) = 6.67(

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.738(	.7859	.8283	.8848	.9262	.9539	1.(015	1.(392
PHI										
185.(((		-.(82(		-.(52(	.(33(	-.(64(	-.(41(	-.(37(		
18(.(((		-.(92(	-.(85(	-.(69(						

MACH (3) = 3.5(2 BETAT (7) = 8.89(

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.((((	.(((5	.(188	.(333	.(5(2	.1355	.1545	.1581	.1732	.1958	.2259	.2711	.32((	.3953	.512(
PHI															
.(((	1.221(	.742(	.354(	.(34(	-.(94(	.(69(			.(59(		.(39(	.(12(	.(27(	-.(42(	-.(36(
2(.(((			.32((	.(62(	-.(48(	.(42(			.(74(		.((1(				
4(.(((			.3(3(	.(1((	-.(26(	-.(23(			-.(47(		-.(15(	-.(48(	-.(58(	-.(73(	-.(85(
55.(((			.26((	.(1((	-.(26(	-.(32(			-.(27(		-.(19(				
7(.(((			.23((	.(1((	-.(39(	-.(27(			-.(23(		-.(3((	-.(42(	-.(49(	-.(52(	-.(6((
9(.(((		.529(	.2(9(	-.(22(	-.(4((	-.(28(			-.(42(		-.(32(	-.(62(	-.(65(	-.(58(	-.(62(
12(.(((			.2(7(	-.(4((	-.(15(	-.(17(			-.(54(		-.(5((	-.(62(	-.(68(	-.(68(	-.(54(
142.(((										-.(39(					
15(.(((			.247(	.(45(	.(33(	.(4((			.223(		-.(6((	-.(64(	-.(67(	-.(77(	-.(76(
157.(((								.456(							
162.(((									.48((						
165.(((											-.(24(	-.(65(	-.(61(	-.(69(	-.((((
168.(((									.5(5(						
172.(((							.468(								
18(.(((	1.221(	.625(	.294(	.(95(	.(61(	.(9((			.662(		-.(59(	-.(66(	-.(64(	-.(69(	-.(68(

X/LB	.5873	.6626	.738(	.7889	.8283	.8848	.9262	.9639	1.(015	1.(392
PHI										
.(((	-.(29(							-.(83(		-.(77(
4(.(((	-.(84(	-.(61(		-.(49(	-.(48(	-.(69(	-.(79(			-.(66(
7(.(((		-.(78(	-.(87(	-.(75(	-.(74(	-.(71(	-.(75(	-.(64(		
9(.(((		-.(79(	-.(78(	-.(75(	-.(62(	-.(71(	-.(71(	-.(67(		
115.(((				-.(47(	-.(56(	-.(7((	-.(75(	-.(72(		
11(.(((									-.(32(	
12(.(((		-.(58(	-.(68(	.(22(	-.(59(	-.(7((	-.(83(	-.(75(	-.(64(	
135.(((				.911(	.(69(	-.(57(	-.(62(	-.(53(		
15(.(((		-.(98(	-.(98(	-.(77(	-.(68(	-.(89(	-.(84(	-.(77(		
165.(((		-.1(4(		-.(83(	-.(58(	-.(65(	-.(65(	-.(7((		
18(.(((		-.1(2(	-.(93(	-.(78(						

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB22) (10 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

MACH (1) = 2.499 BETAT (1) = -8.370

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2800	.8990	.4360	.0520	.0550	.0720			.0230		.0250	-.0210	-.0330	-.0430	-.0340
20.000			.5130	.0920	.1110	.0350			.0180		-.0180				
40.000			.6630	.1910	.1720	.1620			.0720		-.0010	-.0460	-.0380	-.0140	.0990
55.000			.7180	.2400	.2090	.3280			.2320		.1380				
70.000			.7130	.2390	.1680	.3430			.2590		.1620	.0530	-.0190	-.0250	-.0040
90.000		1.0990	.6240	.1930	.1540	.3330			.2660		.2730	.0460	-.0330	-.0570	-.0330
120.000			.4960	.1580	.1360	.2160			.5380		.1220	-.0240	-.0580	-.0960	-.0950
142.000										.1510					
150.000			.3940	.0950	.0950	.2160			.5650		-.0180	-.0650	-.0660	-.0690	-.0900
157.000								.5870							
162.000									.5830						
165.000											-.0460	.0020	-.0190	-.0540	-.0940
169.000									.4720						
172.000							.4370								
180.000	1.2800	.7370	.2400	.0570	.0550	.1500			.5930		-.1310	-.1210	-.1670	-.1720	-.1550

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0210							-.1180		-.0680
40.000	.1070	.0840		.2340	.1700	.1280	-.0010			-.1230
70.000		-.0280	-.0540	-.0520	-.0680	-.0250	-.0460	-.0330		
90.000		-.0220	-.0430	-.0350	.0550	-.0120	-.0100	-.0050		
105.000				.0750	.1240	.0770	-.0130	-.0200		
110.000									.0320	
120.000		-.0840	-.0860	.4500	.3020	.0250	-.0250	-.0160	-.0260	
135.000				.0660	.1070	-.1370	-.1570	-.1200		
150.000		-.0940	-.0920	-.0460	-.0710	-.1740	-.1620	-.1310		
165.000		-.0790		-.0180	.0110	-.0790	.0190	-.0350		
180.000		-.1250	-.1300	-.1070						

AMES 87-75/7 IA9 ORA + 33 + 79 ORBITER FUSELAGE (SHA822)

MACH (1) = 2.499 BETA (2) = -6.29

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0500	.0839	.1682	.1355	.1548	.1581	.1732	.1958	.2259	.2711	.3220	.3953	.5120
RHI															
.000	1.2999	.9240	.5140	.2110	.0540	.1370			.0959		.0599	.0210	-.0320	-.0520	-.0790
2.000			.5490	.1460	.0870	.0320			.0330		-.0930				
4.000			.5450	.1980	.1390	.1270			.0510		-.0920	-.1440	-.0590	-.0140	.0490
55.000			.5710	.1970	.1250	.0770			.0320		.0120				
7.000			.6350	.1590	.1290	.0240			.0220		.1410	.0260	-.1450	-.0590	-.0340
9.000		1.1670	.5750	.1540	.0140	.0290			.0230		.0220	.0240	-.0550	-.0790	-.0540
12.000			.4530	.1290	.0660	.0190			.0370		.0190	-.0310	-.0570	-.0170	-.0190
142.000										.0640					
15.000			.3720	.0630	.0750	.0550			.0330		-.0310	-.0590	-.0490	-.0620	-.0120
157.000								.0620							
162.000									.0430						
165.000											-.0690	-.0240	-.0350	-.0690	-.0190
190.000									.0450						
172.000							.0570								
180.000	1.2999	.7930	.2440	.0870	.0490	.0110			.0190		-.0370	-.0330	-.0440	-.0690	-.0330

X/LB	.5075	.5520	.7500	.7559	.9203	.9240	.9252	.9539	1.0015	1.0392
RHI										
.000	-.0420							-.0110		-.0690
4.000	.0890	.0850		.0830	.0170	.0090	-.0310			-.0330
7.000		-.0390	-.0780	-.0710	-.0540	-.0420	-.0310	-.0590		
9.000		-.0590	-.0640	-.0570	.0310	-.0260	-.0260	-.0270		
138.000				.0440	.0990	-.0260	-.0260	-.0390		
111.000								.0130		
122.000		-.0870	-.0990	.0790	.0250	.0050	-.0360	-.0340	-.0400	
135.000				.0540	.0420	-.0990	-.0570	-.0110		
150.000		-.0180	-.0980	-.0420	-.0340	-.0540	-.0610	-.0490		
165.000		-.0940		-.0210	.0120	-.0350	.0410	-.0330		
180.000		-.0220	-.0380	-.0590						

MACH (1) = 2.499 BETA (3) = -4.15

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0500	.0839	.1682	.1355	.1548	.1581	.1732	.1958	.2259	.2711	.3220	.3953	.5120
RHI															
.000	1.3370	.9080	.5380	.1290	-.0110	.0790			.0590		.0690	.0410	.0190	-.0560	-.0790
2.000			.5690	.1940	.0590	.0450			.0160		.0590				
4.000			.5870	.1960	.1940	.1090			.0580		.0950	-.0280	-.0320	-.0190	.0490
55.000			.6310	.2340	.1770	.2280			.0520		.0630				
7.000			.6130	.1940	.2160	.2550			.0190		.1190	.0490	-.0550	-.0740	-.0820
9.000		1.1370	.5330	.2140	.0890	.1850			.0270		.0910	.0430	-.0560	-.0870	-.0890
12.000			.4240	.1990	.0820	.1380			.0190		.0140	-.0270	-.0730	-.0190	-.0210

AMES 67-PTS BASIC OEA + 33 + 79 ORBITER FUSELAGE (PBAB22)

MACH (1) = 2.499 BETA (3) = -4.1%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

Y/B	.0000	.0075	.0188	.0339	.0502	.1355	.1548	.1581	.1732	.1958	.2239	.2711	.3200	.3953	.5120
Z/C															
142.0000										.1270					
139.0000			.3540	.1880	.0770	.1330			.5120		-.0550	-.0650	-.0800	-.0850	-.1160
137.0000								.5880							
132.0000									.5200						
125.0000											-.1160	-.0930	-.0450	-.0730	-.1020
119.0000									.4690						
112.0000							.5170								
109.0000	1.3370	.7570	.2480	.0820	.0620	.0190			.6350		-.1420	-.1410	-.1030	-.1480	-.1110
X/LB	.5873	.6825	.7580	.7999	.8283	.8848	.9252	.9539	1.0015	1.0392					
Z/C															
.000	-.0710							-.2100		-.1520					
4.000	.0390	.0410		.1390	.0620	.0490	-.0490			-.1170					
7.000		-.0780	-.0870	-.0850	-.0990	-.0630	-.0630	-.0710							
9.000		-.0770	-.0770	-.0730	.0190	-.0430	-.0470	-.0430							
11.000				.0250	.0190	-.0430	-.0450	-.0550							
14.000									.0170						
17.000		-.0120	-.0090	.0000	.0210	-.0140	-.0550	-.0900	-.0530						
22.000				.0170	.0110	-.0140	-.0420	-.0940							
25.000		-.0510	-.0830	-.0190	-.0190	-.0370	-.0270	-.0101							
28.000		-.0990		-.0120	.0200	-.0090	.0070	-.0430							
30.000		-.0560	-.0890	-.0370											

MACH (1) = 2.499 BETA (4) = .0%

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1548	.1581	.1732	.1958	.2239	.2711	.3200	.3953	.5120
Z/C															
.000	1.3870	1.0000	.5720	.1430	-.1270	.0190			.2120		.0170	-.0780	-.0220	-.0920	-.1080
2.000			.5490	.1850	-.0350	-.0120			.1710		.0080				
4.000			.5870	.1590	.0980	.0290			.1390		.0350	-.0030	-.0270	-.0780	-.0380
55.000			.5490	.1550	.0190	.0430			.1280		.0690				
7.000			.4980	.1240	.0390	.0470			.1250		.0370	-.0180	-.0760	-.0930	-.0990
9.000		.0580	.4330	.0990	.0990	.0620			.0990		.0130	-.0220	-.0770	-.1030	-.1100
12.000			.3480	.0470	.0220	.0650			.0110		.0290	-.0590	-.0890	-.1070	-.1240
142.000										-.0390					
139.000			.3790	.0440	.0440	.0240			.0430		-.0990	-.1110	-.1140	-.0990	-.0870
137.000								.0990							
132.000									.0460						
125.000											-.1330	-.1280	-.0980	-.0730	-.0740
119.000									.0480						
112.000							.0880								

AMES 87-7U7 IA9 O2A + 93 + T9 ORBITER FUSELAGE (RB=B22)

MACH (1) = 2.499 BETAT (4) = .UU

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.U175	.U180	.U339	.U6U2	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.32UU	.3953	.512U
PHI															
18U.UUU	1.387U	.79UU	.249U	.U61U	.U57U	.1U3U			.639U		-.148U	-.133U	-.121U	-.U59U	-.U63U

X/LB	.5073	.5626	.738U	.7889	.8283	.8848	.9282	.9639	1.UU15	1.U392
PHI										
.UUU	-.UU7U							-.U56U		-.U41U
4U.UUU	.U13U	.U71U		.U69U	.U25U	-.U34U	-.U79U			-.U69U
7U.UUU		-.1U5U	-.112U	-.1U8U	-.1U1U	-.U76U	-.U95U	-.U91U		
9U.UUU		-.U99U	-.U99U	-.U39U	-.U28U	-.U52U	-.U69U	-.U72U		
115.UUU				.U48U	.U38U	-.U51U	-.U63U	-.U76U		
11U.UUU									-.U61U	
12U.UUU		-.U81U	-.U8UU	.U09U	.111U	-.U41U	-.U61U	-.U54U	-.U69U	
135.UUU				.U64U	.116U	-.U41U	-.U77U	-.U25U		
15U.UUU		-.U85U	-.U74U	.U49U	.U71U	-.U36U	-.U2UU	-.U06U		
185.UUU		-.U82U		.U25U	.1U5U	.U49U	.U13U	-.U49U		
18U.UUU		-.U79U	-.U77U	-.U63U						

MACH (1) = 2.499 BETAT (5) = 4.33U

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.UUUU	.U175	.U180	.U339	.U6U2	.1355	.1546	.1581	.1732	.1958	.2259	.2711	.32UU	.3953	.512U
PHI															
.UUU	1.352U	.97UU	.522U	.129U	-.U24U	.129U			.149U		.U71U	.U51U	.U1UU	-.U53U	-.U71U
2U.UUU			.5U3U	.138U	-.U33U	.U97U			.185U		.U59U				
4U.UUU			.481U	.114U	.U15U	.U26U			.124U		.U34U	-.U29U	-.U34U	-.U99U	-.U28U
55.UUU			.436U	.111U	.U47U	-.U2UU			.U29U		.U54U				
7U.UUU			.373U	.U33U	-.U19U	-.U99U			.U11U		.U92U	-.U23U	-.U61U	-.1U3U	-.118U
9U.UUU		.U32U	.319U	-.U13U	-.U3UU	.U15U			-.U41U		.U74U	-.U3UU	-.U59U	-.1U8U	-.122U
12U.UUU			.254U	-.U41U	-.U17U	.U29U			.U55U		-.U19U	-.1U7U	-.1U1U	-.1U6U	-.U95U
142.UUU										-.U82U					
15U.UUU			.254U	.U17U	.U29U	.U72U			.338U		-.1U9U	-.14UU	-.124U	-.U7UU	-.U65U
157.UUU								.549U							
182.UUU									.43UU						
185.UUU											-.14UU	-.15UU	-.125U	-.U68U	-.U63U
199.UUU									.462U						
172.UUU							.543U								
18U.UUU	1.332U	.779U	.239U	.U53U	.U63U	.U92U			.623U		-.142U	-.139U	-.1U9U	-.145U	-.112U

X/LB	.5073	.6626	.738U	.7889	.8283	.8848	.9282	.9639	1.UU15	1.U392
PHI										
.UUU	-.U83X							-.U72U		-.U47U
UUU	-.U42U	.U94U		-.U23U	-.U15U	-.U45U	-.U92U			-.U54U

AMES 87-7.7 IA3 ORA + 33 + 79 ORBITER FUSELAGE (PBMB22)

MACH (1) = 2.499 BETA (5) = 4.33

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6826	.7389	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
71.000		-.0599	-.1159	-.1153	-.1085	-.1087	-.0999	-.1121		
91.000		-.0789	-.1483	-.1555	-.1558	-.1487	-.1085	-.1926		
119.000				-.1229	-.1435	-.1564	-.1624	-.1998		
111.000									-.1499	
121.000		-.1587	-.1788	.1982	.1824	-.1653	-.1789	-.1852	-.1659	
135.000				.1599	.1711	-.1653	-.1515	-.1847		
151.000		-.1859	-.1882	.1533	.1599	-.1518	-.1778	-.1922		
165.000		-.1899		.1527	.1359	.1385	.1922	-.1555		
181.000		-.1894	-.1939	-.1941						

MACH (1) = 2.499 BETA (5) = 8.48

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0078	.0188	.0339	.0502	.1355	.1548	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5129
PHI															
.000	1.3129	.9399	.5140	.1199	-.1259	.1379			.1759		.1459	.1189	-.1926	-.1529	-.1599
21.000			.4859	.1221	-.1599	.1599			.1469		.1369				
41.000			.4449	.1999	-.1299	.1137			.1149		.1999	-.1489	-.1619	-.1137	-.1659
59.000			.3369	.1599	.1953	-.1489			-.1169		.1299				
79.000			.3129	.1359	-.1462	-.1279			.1949		.1619	-.1321	-.1859	-.1119	-.1259
99.000		.7539	.2599	-.1469	-.1479	-.1159			-.1999		.1359	-.1469	-.1679	-.1129	-.1219
121.000			.2159	-.1279	-.1379	-.1159			.1469		-.1469	-.1219	-.1119	-.1189	-.1999
142.000										-.2139					
159.000			.2219	.1941	.1599	.1399			.2749		-.1299	-.1349	-.1369	-.1799	-.1779
197.000								.3899							
152.000									.4119						
185.000											-.1549	-.1599	-.1339	-.1129	-.1749
199.000									.4599						
172.000							.4719								
189.000	1.3129	.7619	.2339	.1489	.1599	.1999			.5999		-.1349	-.1399	-.1519	-.1729	-.1399

X/LB	.5873	.6826	.7389	.7869	.8283	.8848	.9282	.9639	1.0015	1.0392
PHI										
.000	-.0537							-.1919		-.1659
41.000	-.0111	.1489		-.1139	-.1489	-.1639	-.1949			-.1739
71.000		-.1511	-.1111	-.1599	-.1889	-.1999	-.1139	-.1149		
91.000		-.1821	-.1919	-.1639	-.1849	-.1699	-.1949	-.1989		
119.000				-.1329	-.1599	-.1679	-.1929	-.1989		
131.000									-.1489	
121.000		-.1995	-.1789	.1999	.1939	-.1679	-.1929	-.1789	-.1769	
139.000				.2999	.2199	-.1739	-.1799	-.1999		
159.000		-.1992	-.1939	.1249	.1189	-.1759	-.1879	-.1979		

AMES 87-757 IA9 ORA + S3 + T9 ORBITER FUSELAGE (FBNB22)

MACH (1) = 2.499 BETAT (6) = 5.49

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
180.000		-.1995		-.0340	.0995	-.0421	-.0495	-.0440		
180.000		-.1140	-.1536	-.0940						

MACH (1) = 2.499 BETAT (7) = 5.00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0175	.0508	.0839	.1202	.1555	.1905	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.2895	.9020	.4355	.0540	.0321	.0999			.0222		.0139	-.0239	-.0340	-.0339	-.0240
2.000			.3920	.0467	-.0290	.1210			.0020		.0101				
4.000			.3570	.0359	-.0339	.0910			.0530		-.0650	-.0770	-.0990	-.1290	-.0980
55.000			.3190	.0320	-.1200	-.0620			-.0590		-.0120				
7.000			.2530	-.0130	-.0710	-.0320			.0000		.0370	-.0460	-.0910	-.1180	-.1290
9.000		.6910	.2070	-.0720	-.1470	-.0530			-.0220		.0160	-.0690	-.0920	-.1150	-.1140
12.000			.1620	-.0480	-.0990	-.0370			-.0370		-.0660	-.1310	-.1140	-.1160	-.0920
142.000										-.1180					
150.000			.1970	-.0120	-.0430	-.0160			.0220		-.1380	-.1640	-.1480	-.0930	-.1010
157.000								.4140							
162.000									.3950						
165.000											-.1720	-.1660	-.1410	-.1510	-.1160
169.000									.4370						
172.000							.4270								
180.000	1.2895	.7470	.2310	.0470	.0310	.1160			.5590		-.1340	-.1220	-.1720	-.1830	-.1640

X/LB	.5873	.6626	.7386	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.1220							-.0850		-.0580
4.000	-.0810	-.0940		-.0390	-.0370	-.0730	-.0810			-.0690
7.000		-.1530	-.1170	-.1140	-.0980	-.0910	-.1040	-.1560		
9.000		-.0850	-.0970	-.0740	-.0730	-.0770	-.0930	-.1530		
115.000				-.0290	-.0650	-.0770	-.0920	-.1040		
11.000									-.0970	
120.000		-.1140	-.0840	.0090	.0110	-.1140	-.1570	-.0960	-.0860	
135.000				.3010	.2420	-.1150	-.0990	-.0750		
150.000		-.1180	-.1240	-.0470	-.0560	-.1550	-.1260	-.1020		
165.000		-.1190		-.0550	.0140	-.0830	-.0880	-.0750		
180.000		-.1280	-.1390	-.1130						

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AMES 97-737 IA9 02A + 33 + 79 ORBITER FUSELAGE (RBNB22)

MACH (2) = 2.999 BETAT (1) = -8.53

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1480	.8460	.3990	.0350	.0090	.0040			.0530		-.0050	.0140	-.0170	-.0390	-.0190
2.000			.4660	.0750	.0140	.0830			.0170		-.0050				
4.000			.5130	.1720	.1110	.2850			.1440		.0790	.0090	-.0480	-.0270	.0180
55.000			.5550	.2310	.1720	.3590			.2750		.1610				
7.000			.6310	.2240	.1590	.3420			.2850		.2130	.0920	.0230	-.0030	-.0080
9.000		1.0620	.6410	.2220	.1330	.1760			.3020		.2740	.0930	.0110	-.0240	-.0290
12.000			.4930	.1950	.1320	.1780			.2570		.1740	.0330	-.0190	-.0510	-.0570
142.000										.0920					
150.000			.3940	.1130	.0970	.1490			.5310		-.0110	-.0290	-.0350	-.0380	-.0480
157.000								.5680							
162.000									.5590						
165.000											-.0410	-.0140	.0070	-.0150	-.0480
169.000									.4920						
172.000							.4410								
180.000	1.1480	.7340	.2820	.0720	.0480	.0710			.5480		-.0890	-.0940	-.1120	-.1210	-.1270
X/LB	.5873	.5628	.7380	.7869	.8283	.8248	.9262	.9539	1.0015	1.0332					
PHI															
.000	-.0370							-.1130		-.0690					
40.000	.0460	.0780		.1990	.1870	.1090	.0270			-.0770					
70.000		-.0320	-.0560	-.0390	-.0430	-.0120	-.0980	-.0980							
90.000		-.0250	-.0460	-.0360	.0510	.0180	.0060	.0220							
115.000				.0220	.2140	.2130	.0230	.0120							
120.000									.0890						
125.000		-.0720	-.0770	.3320	.2490	.0550	.0110	.0130	.0030						
135.000				.0730	.1170	-.0630	-.2100	-.0810							
150.000		-.0730	-.0770	-.0470	-.0470	-.1310	-.1240	-.0820							
165.000		-.0710		-.0250	-.0930	-.0730	-.0960	-.0270							
180.000		-.1090	-.1130	-.0840											

MACH (2) = 2.999 BETAT (2) = -4.29

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3170	.9170	.4450	.0680	.0470	-.0370			.1510		.0850	.0650	.0490	-.0070	-.0510
2.000			.4810	.0780	.0680	-.0380			.1150		.0410				
4.000			.5760	.1390	.0970	.1640			.1220		.0460	.0080	-.0220	-.0310	.0080
55.000			.6150	.1720	.1090	.1490			.2270		.1240				
7.000			.5870	.1540	.0810	.1150			.2350		.1570	.0480	-.0120	-.0390	-.0480
9.000		.9920	.5130	.1330	.0880	.1130			.1250		.2220	.0480	-.0180	-.0440	-.0580
12.000			.4280	.1250	.0860	.1160			.1450		.1870	.0000	-.0280	-.0620	-.0810

AMES 87-747 IA9 02A + 33 + T9 ORBITER FUSELAGE (FB1822)

MACH (2) = 2.999 BETAT (2) = -4.23

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5120
PHI															
142.000										.0370					
150.000			.3610	.0990	.0780	.1180			.4690		-.0390	-.0550	-.0530	-.0540	-.0710
157.000								.5650							
162.000									.5110						
165.000											-.0610	-.0660	-.0480	-.0380	-.0650
169.000									.4780						
172.000							.5240								
180.000	1.3170	.7880	.2690	.0810	.0650	.0880			.6350		.0920	-.0960	-.0990	-.1120	-.1050

X/LB	.5073	.6028	.7380	.7980	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0730							-.1170		-.0850
40.000	.0870	.0280		.1220	.0920	.0490	-.0520			-.0990
70.000		-.0570	-.0870	-.0770	-.0720	-.0790	-.0780	-.0470		
90.000		-.0580	-.0750	-.0770	-.0670	-.0470	-.0530	-.0140		
115.000				-.0180	.0130	.0170	-.0350	-.0260		
135.000									.0270	
120.000		-.0850	-.0870	.1980	.1290	-.0140	-.0460	.0150	-.0260	
135.000				.0720	.0890	-.0130	-.0310	-.0610		
150.000		-.0810	-.0820	-.0390	-.0260	-.0390	-.0340	-.0780		
165.000		-.0880		-.0590	-.0540	-.0530	-.0640	-.0420		
180.000		-.0890	-.0770	-.0880						

MACH (2) = 2.999 BETAT (5) = .05

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0502	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3249	.3953	.5120
PHI															
.000	1.3580	.9710	.4780	.0540	.0260	-.0390			.1190		.1660	.0710	.0720	-.0070	-.0510
20.000			.4920	.0770	.0420	-.0330			.1250		.1150				
40.000			.5420	.0770	.0720	-.0330			.1890		.0550	.0280	.0240	-.0190	-.0480
55.000			.5390	.0810	.0530	.0260			.1480		.0990				
70.000			.4960	.0890	.0260	.0460			.1520		.0990	.0170	-.0380	-.0550	-.0790
90.000		.9330	.4290	.0780	.0260	.0530			.1460		.0610	.0120	-.0330	-.0580	-.0790
120.000			.3450	.0740	.0440	.0160			.0530		.0160	-.0590	-.0360	-.0660	-.0840
142.000										-.0990					
150.000			.3190	.0790	.0580	.0870			.1490		-.0590	-.0910	-.0860	-.0710	-.0540
157.000								.0530							
162.000									.0630						
169.000											-.0690	-.0910	-.0980	-.0680	-.0540
199.000									.0790						
[illegible] .000							.0540								

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBN822)

MACH (2) = 2.999 BETAT (3) = .00

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3580	.7820	.2670	.0800	.0690	.1000			.0570		-.0980	-.0920	-.0900	-.0740	-.0480

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0750							-.1180		-.0370
40.000	-.0320	.0110		.0410	.0130	-.0390	-.0890			-.0890
70.000		-.0940	-.1010	-.0930	-.0710	-.1000	-.1090	-.0750		
90.000		-.0910	-.0930	-.0550	-.0390	-.0800	-.0910	-.0540		
105.000				-.0270	-.0260	-.0770	-.0780	-.0530		
110.000									.0240	
120.000		-.0790	-.0750	.0210	.0550	-.0600	-.0730	-.0420	-.0440	
135.000				.0620	.0820	-.0860	-.0980	-.0270		
150.000		-.0680	-.0680	.0170	.0560	-.0850	-.0700	-.0210		
165.000		-.0580		-.0360	.0640	.0050	-.0270	-.0340		
180.000		-.0560	-.0610	-.0570						

MACH (2) = 2.999 BETAT (4) = 4.40

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3070	.9140	.4250	.0580	.0410	-.0370			.1450		.0780	.0630	.0460	-.0080	-.0500
20.000			.4280	.0630	.0310	-.0370			.1630		.0960				
40.000			.4420	.0630	.0440	-.0260			.0750		.0440	.0160	-.0490	-.0480	-.0820
59.000			.4240	.0620	.0160	-.0220			-.0110		.0270				
70.000			.3710	.0600	-.0210	-.0610			-.0630		.0120	-.0050	-.0410	-.0670	-.0820
90.000		.8030	.3140	.0190	-.0200	.0060			-.0130		.0070	-.0500	-.0460	-.0670	-.0860
120.000			.2630	.0250	.0040	.0150			.0040		-.0230	-.0850	-.0890	-.0700	-.0750
142.000										-.0460					
150.000			.2650	.0410	.0350	.0580			.2910		-.0760	-.1040	-.1030	-.0820	-.0470
157.000								.5020							
162.000									.4460						
165.000											-.1060	-.1110	-.0990	-.0830	-.0550
169.000									.4700						
172.000							.4990								
180.000	1.3070	.7710	.2590	.0730	.0660	.0830			.6250		-.0940	-.0980	-.0940	-.1070	-.1060

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0870							-.0750		-.0520
40.000	-.0500	-.0150		-.0050	-.0200	-.0330	-.0850			-.0520

AMES 87-707 IA9 02A + S3 + T9 ORBITER FUSELAGE (RBNB22)

MACH (2) = 2.999 BETAT (4) = 4.400

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
75.000		-.1510	-.1510	-.0950	-.0820	-.0740	-.0840	-.0820		
90.000		-.0880	-.0890	-.0740	-.0670	-.0660	-.0680	-.0740		
105.000				-.0580	-.0580	-.0630	-.0650	-.0730		
110.000									-.0290	
120.000		-.0780	-.0890	.0390	-.0280	-.0650	-.0640	-.0510	-.0480	
135.000				.1320	.1050	-.0660	-.0640	-.0450		
150.000		-.0640	-.0680	.0250	.1310	-.0370	-.0580	-.0550		
165.000		-.0690		-.0310	.0580	.0110	-.0220	-.0380		
180.000		-.0860	-.0880	-.0730						

MACH (2) = 2.999 BETAT (5) = 8.750

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3240	.3953	.5120
PHI															
.000	1.1380	.8340	.3770	.0240	.0160	.0290			.0560		-.1040	.0140	-.0240	-.0470	-.0260
20.000			.3470	.0190	.0110	-.0370			.0430		-.0580				
40.000			.3310	.0150	-.0320	-.0510			.0870		-.0240	-.0580	-.0760	-.0950	-.1050
55.000			.3020	.0010	-.0370	-.0450			-.0370		-.0180				
70.000			.2510	.0020	-.0630	-.0370			-.0220		.0000	-.0400	-.0580	-.0800	-.0920
90.000		.6370	.2080	-.0370	-.0590	-.0320			-.0380		-.0270	-.0660	-.0590	-.0770	-.0920
120.000			.1890	-.0260	-.0330	-.0320			-.0250		-.0580	-.0980	-.0990	-.0970	-.0620
142.000										-.0740					
150.000			.2070	.0130	.0040	-.0010			.2020		-.0940	-.1220	-.1180	-.0930	-.0920
157.000								.3950							
162.000									.4110						
165.000											-.1240	-.1220	-.1120	-.1190	-.1230
189.000									.4350						
172.000							.3610								
180.000	1.1380	.7410	.2440	.0620	.0550	.0660			.5840		-.0910	-.1020	-.1230	-.1310	-.1340

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0280							-.0850		-.0750
40.000	-.0990	-.0380		-.0480	-.0670	-.0710	-.0770			-.0750
70.000		-.0980	-.1130	-.0950	-.0860	-.0780	-.0860	-.0890		
90.000		-.0910	-.0920	-.0810	-.0580	-.0630	-.0770	-.0820		
105.000				-.0590	-.0620	-.0630	-.0790	-.0820		
110.000									-.0340	
120.000		-.0830	-.0910	.0280	-.0610	-.0880	-.0870	-.0810	-.0690	
135.000				.1870	.1570	-.0710	-.0760	-.0750		
150.000		-.1070	-.1090	-.0640	-.0670	-.1160	-.1090	-.0940		

DATE 17 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 OEA + S3 + T9 ORBITER FUSELAGE (FBNB22)

MACH (2) = 2.999 BETAT (5) = 8.750

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
183.000		-.1090		-.0670	-.0310	-.0870	-.0860	-.0990		
180.000		-.1120	-.1050	-.0860						

MACH (3) = 3.502 BETAT (1) = -8.680

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1330	.8130	.3990	.0440	.0120	-.0130			.0990		.0300	.0020	.0140	-.0230	-.0390
20.000			.4620	.0860	.0280	.1180			.0670		.0180				
40.000			.5260	.1370	.1210	.3320			.2420		.1000	.0560	-.0010	-.0330	.0130
55.000			.6270	.1560	.1630	.1940			.2970		.2030				
70.000			.6220	.2050	.1460	.1760			.3210		.2350	.1150	.0440	.0140	-.0020
90.000		1.1250	.6450	.2210	.1370	.1740			.1850		.2070	.1160	.0340	-.0030	-.0170
120.000			.4590	.2060	.1360	.1690			.1840		.1460	.0370	.0040	-.0260	-.0560
142.000										.0980					
150.000			.3910	.1220	.1160	.1440			.0120		.0020	-.0210	-.0210	-.0310	-.0430
157.000								.5750							
162.000									.0580						
165.000											-.0190	-.0180	-.0110	-.0010	-.0410
169.000									.0490						
172.000							.5520								
180.000	1.1380	.7380	.2550	.0840	.0670	.0750			.0850		-.0600	-.0680	-.0980	-.0860	-.0990

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0380							-.0710		-.0710
40.000	.0060	.0840		.1630	.1310	.1030	.0960			-.0490
70.000		-.0250	-.0490	-.0410	-.0350	.0190	.0110	-.0010		
90.000		-.0260	-.0370	-.0350	.0160	.0170	.0310	.0290		
105.000				.0040	.0500	.0520	.0620	.0290		
111.000									.0570	
120.000		-.0570	-.0610	.2530	.2080	.0810	.0480	.0320	.0200	
135.000				.0540	.1030	-.0350	-.0560	-.0580		
150.000		-.0590	-.0630	-.0400	-.0300	-.0770	-.0700	-.0610		
165.000		-.0620		-.0310	-.0140	-.0370	.0090	-.0180		
180.000		-.0940	-.0880	-.0710						

AMES 87-707 IA9 CBA + S3 + T9 ORBITER FUSELAGE (RBNB22)

MACH (3) = 3.552 BETAT (2) = -6.490

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1735	.8710	.4210	.0520	.0190	-.0380			.1250		.0380	.0170	.0010	.0070	-.0300
20.000			.4750	.0820	.0270	-.0190			.0650		.0280				
40.000			.5920	.1320	.0900	.1280			.1760		.0750	.0410	-.0200	-.0370	-.0630
55.000			.6170	.1460	.1390	.1410			.2570		.1710				
70.000			.5750	.1620	.1160	.1310			.1440		.2000	.0910	.0280	-.0040	-.0210
90.000		.9200	.5480	.1670	.1070	.1330			.1450		.1960	.0880	.0230	-.0140	-.0310
125.000			.4610	.1660	.1110	.1360			.1430		.0860	.0150	-.0010	-.0340	-.0570
142.000										.0740					
150.000			.3770	.1100	.0910	.1260			.4790		-.0100	-.0330	-.0350	-.0380	-.0470
157.000								.5630							
162.000									.5260						
165.000											-.0300	-.0360	-.0360	-.0150	-.0400
169.000									.4840						
172.000							.5460								
180.000	1.1730	.7630	.2640	.0840	.0700	.0790			.6060		-.0610	-.0700	-.0800	-.0790	-.0960

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0332
PHI										
.000	-.0370							-.0710		-.0610
40.000	-.0010	.0440		.1540	.1160	.0630	.0380			-.0570
70.000		-.0440	-.0620	-.0490	-.0450	-.0130	-.0180	-.0160		
90.000		-.0430	-.0500	-.0420	-.0030	-.0110	.0050	.0080		
105.000				-.0090	.0270	-.0090	.0330	.0110		
110.000									.0340	
120.000		-.0680	-.0670	.2040	.1510	.0320	.0190	.0080	.0030	
135.000				.0560	.0950	-.0150	-.0680	-.0630		
150.000		-.0650	-.0670	-.0390	-.0290	-.0790	-.0780	-.0640		
165.000		-.0640		-.0360	-.0120	-.0410	-.0020	-.0290		
180.000		-.0900	-.0830	-.0620						

MACH (3) = 3.502 BETAT (3) = -4.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2180	.9150	.4490	.0760	.0240	-.0300			.0650		.0870	.1050	.0520	.0180	-.0280
20.000			.4850	.0960	.0420	-.0340			.0910		.0540				
40.000			.5790	.1290	.0860	.0310			.1620		.0640	.0310	-.0100	-.0230	-.0650
55.000			.6020	.1350	.1090	.0870			.2250		.1450				
70.000			.5650	.1430	.0880	.0760			.1060		.1750	.0660	.0090	-.0160	-.0350
90.000		.9480	.3020	.1430	.0860	.0770			.0990		.1620	.0730	.0110	-.0230	-.0490
120.000			.4280	.1420	.0900	.1040					.0560	-.0080	-.0120	-.0400	-.0600

AMES 87-707 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB22)

MACH (3) = 3.502 BETAT (3) = -4.310

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
142.000										.0480					
150.000			.3650	.1040	.0810	.1100			.4340		-.0250	-.0400	-.0460	-.0430	-.0560
157.000								.5440							
162.000									.4960						
165.000											-.0370	-.0480	-.0490	-.0330	-.0430
169.000									.4810						
172.000							.5180								
180.000	1.2180	.7810	.2710	.0900	.0700	.0660			.6310		-.0620	-.0690	-.0710	-.0760	-.0860

X/LB	.3873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0520							-.0720		-.0440
40.000	.0420	.0490		.1230	.0770	.0370	.0090			-.0670
70.000		-.0610	-.0720	-.0620	-.0590	-.0310	-.0360	-.0340		
90.000		-.0590	-.0550	-.0640	-.0250	-.0120	-.0190	-.0150		
105.000				-.0310	.0420	-.0080	.0060	-.0100		
110.000									.0110	
120.000		-.0730	-.0760	.1460	.1070	-.0010	-.0050	-.0070	-.0110	
135.000				.0540	.0730	-.0400	-.0740	-.0640		
150.000		-.0680	-.0720	-.0400	-.0290	-.0830	-.0780	-.0650		
165.000		-.0680		-.0400	-.0150	-.0280	-.0190	-.0410		
180.000		-.0770	-.0710	-.0610						

MACH (3) = 3.502 BETAT (4) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.3600	.9950	.5110	.0630	-.0080	-.0320			.0270		.1550	.0770	.0680	.0180	-.0210
20.000			.5230	.0960	-.0100	-.0350			.0380		.1580				
40.000			.5640	.1040	.0370	-.0300			.0470		.0580	.0290	.0130	.0020	-.0260
55.000			.5530	.1150	.0720	.0180			.0250		.0590				
70.000			.5060	.1090	.0420	.0300			.0400		.0330	.0260	-.0120	-.0350	-.0490
90.000		.9300	.4210	.0800	.0410	.0400			.0450		.0300	-.0140	-.0120	-.0400	-.0560
120.000			.3490	.0800	.0540	.0610			.0360		.0170	-.0440	-.0560	-.0440	-.0640
142.000										.0060					
150.000			.2200	.0800	.0650	.0810			.0500		-.0370	-.0580	-.0690	-.0620	-.0530
157.000								.5180							
162.000									.0560						
165.000											-.0550	-.0690	-.0680	-.0620	-.0490
169.000									.0740						
172.000							.5310								

AMES 87-707 IA9 C2A + S3 + T9 ORBITER FUSELAGE (RBNB22)

MACH (3) = 3.502 BETAT (4) = .060

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
180.000	1.3600	.7890	.2720	.0800	.0730	.0910			.6570		-.0690	-.0690	-.0670	-.0610	-.0510

X/LB	.5873	.6826	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0470							-.0710		-.0300
40.000	-.0480	-.0150		.0200	.0100	-.0100	-.0510			-.0750
70.000		-.0730	-.0860	-.0800	-.0740	-.0610	-.0670	-.0580		
90.000		-.0760	-.0840	-.0720	-.0520	-.0470	-.0560	-.0470		
105.000				-.0450	-.0380	-.0420	-.0390	-.0420		
110.000									-.0090	
120.000		-.0710	-.0720	.0040	.0220	-.0440	-.0410	-.0330	-.0350	
135.000				.0310	.0550	-.0430	-.0630	-.0320		
150.000		-.0570	-.0600	-.0010	.0350	-.0510	-.0410	-.0280		
165.000		-.0500		-.0360	.0330	.0190	-.0030	-.0260		
180.000		-.0480	-.0490	-.0460						

MACH (3) = 3.502 BETAT (5) = 4.480

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.2080	.9070	.4490	.0710	.0200	-.0310			.0710		.0820	.0900	.0500	.0190	-.0280
20.000			.4450	.0760	.0200	-.0330			.0470		.1180				
40.000			.4510	.0760	.0210	-.0280			.0620		.0310	.0130	-.0130	-.0190	-.0560
55.000			.4310	.0780	.0240	-.0270			-.0110		-.0670				
70.000			.3740	.0770	-.0030	-.0150			-.0050		-.0150	-.0340	-.0350	-.0460	-.0610
90.000		.7720	.3090	.0300	-.0020	.0040			.0020		-.0640	-.0450	-.0570	-.0440	-.0640
120.000			.2720	.0420	.0160	.0180			.0030		-.0160	-.0620	-.0730	-.0670	-.0580
142.000										-.0230					
150.000			.2700	.0550	.0420	.0540			.0640		-.0510	-.0760	-.0810	-.0720	-.0530
157.000								.4610							
162.000									.0430						
165.000											-.0750	-.0800	-.0780	-.0690	-.0610
169.000									.0650						
172.000							.4490								
180.000	1.2080	.7840	.2660	.0790	.0680	.0800			.0180		-.0670	-.0730	-.0740	-.0780	-.0960

X/LB	.5873	.6826	.7380	.7889	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0510							-.0670		-.0450
40.000	-.0700	-.0800		-.0190	-.0260	-.0400	-.0790			-.0520

AMES 87-757 IA9 O2A + S3 + T9 ORBITER FUSELAGE (RBNB22)

MACH (3) = 3.502 BETAT (5) = 4.480

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
70.000		-.0830	-.0900	-.0820	-.0750	-.0710	-.0780	-.0650		
90.000		-.0750	-.0810	-.0690	-.0690	-.0580	-.0640	-.0630		
105.000				-.0600	-.0690	-.0570	-.0630	-.0600		
110.000									.0120	
120.000		-.0650	-.0670	.0230	-.0680	-.0570	-.0680	-.0530	-.0460	
135.000				.0760	.0780	-.0570	-.0660	-.0560		
150.000		-.0550	-.0600	.1490	.1090	-.0350	-.0530	-.0490		
165.000		-.0550		-.0340	.0420	-.0080	-.0360	-.0270		
180.000		-.0760	-.0760	-.0650						

MACH (3) = 3.502 BETAT (6) = 6.700

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1540	.8680	.4160	.0570	.0230	-.0380			.1200		.0290	.0080	-.0150	-.0420	-.0310
20.000			.4000	.0560	.0230	-.0440			.0390		.0600				
40.000			.3970	.0580	.0140	-.0430			-.0280		.0290	-.0140	-.0250	-.0460	-.0740
55.000			.3690	.0560	.0050	-.0370			-.0290		-.0130				
70.000			.3110	.0560	-.0210	-.0250			-.0210		-.0240	-.0410	-.0420	-.0550	-.0650
90.000		.7000	.2560	.0660	-.0190	-.0690			-.0180		-.0230	-.0600	-.0590	-.0540	-.0680
120.000			.2290	.0220	-.0420	.0010			-.0250		-.0320	-.0720	-.0780	-.0750	-.0550
142.000										-.0340					
150.000			.2410	.0390	.0280	.0420			.2210		-.0580	-.0810	-.0850	-.0760	-.0550
157.000								.4210							
162.000									.4290						
165.000											-.0640	-.0850	-.0820	-.0790	-.0820
169.000									.4470						
172.000							.4170								
180.000	1.1540	.7620	.2590	.0740	.0650	.0710			.5930		-.0640	-.0730	-.0870	-.0860	-.1040

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0340							-.0640		-.0520
40.000	-.0790	-.0600		-.0380	-.0300	-.0510	-.0710			-.0440
70.000		-.0840	-.0900	-.0830	-.0750	-.0760	-.0820	-.0640		
90.000		-.0750	-.0800	-.0740	-.0750	-.0690	-.0760	-.0610		
105.000				-.0610	-.0660	-.0700	-.0800	-.0640		
110.000									.0350	
120.000		-.0610	-.0700	.0120	-.0640	-.0690	-.0890	-.0700	-.0350	
135.000				.1010	.1250	-.0660	-.0710	-.0580		
150.000		-.0700	-.0710	-.0270	.0260	-.0850	-.0880	-.0610		

AMES 87-767 IA9 OBA + S3 + T9 ORBITER FUSELAGE (RBNB22)

MACH (3) = 3.502 BETAT (6) = 6.709

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
165.000		-.0780		-.0510	.0000	-.0610	-.0670	-.0490		
180.000		-.0900	-.0840	-.0670						

MACH (3) = 3.502 BETAT (7) = 8.919

SECTION (1)ORBITER FUSELAGE DEPENDENT VARIABLE CP

X/LB	.0000	.0075	.0188	.0339	.0602	.1355	.1506	.1581	.1732	.1958	.2259	.2711	.3200	.3953	.5120
PHI															
.000	1.1180	.7990	.3720	.0430	.0120	-.0170			.0870		.0200	.0010	.0090	-.0260	-.0370
20.000			.3370	.0280	.0070	-.0420			.0660		.0010				
40.000			.3240	.0280	-.0180	-.0460			-.0410		-.0300	-.0520	-.0580	-.0720	-.0850
55.000			.2990	.0250	-.0250	-.0470			-.0360		-.0320				
70.000			.2450	.0240	-.0380	-.0360			-.0270		-.0380	-.0460	-.0520	-.0610	-.0690
90.000		.5940	.1990	-.0190	-.0370	-.0290			-.0440		-.0380	-.0670	-.0700	-.0580	-.0700
120.000			.1860	-.0240	-.0220	-.0220			-.0520		-.0490	-.0810	-.0880	-.0840	-.0640
142.000										-.0460					
150.000			.2090	.0230	.0150	.0180			.1810		-.0680	-.0890	-.0910	-.0830	-.0880
157.000								.4120							
162.000									.4030						
165.000											-.0890	-.0890	-.0910	-.0950	-.1070
169.000									.4240						
172.000							.3980								
180.000	1.1160	.7380	.2460	.0670	.0570	.0670			.5720		-.0650	-.0730	-.0930	-.0940	-.1090

X/LB	.5873	.6626	.7380	.7869	.8283	.8848	.9262	.9639	1.0015	1.0392
PHI										
.000	-.0380							-.0850		-.0710
40.000	-.0880	-.0720		-.0470	-.0440	-.0570	-.0740			-.0630
70.000		-.0880	-.0950	-.0850	-.0800	-.0740	-.0780	-.0670		
90.000		-.0790	-.0870	-.0780	-.0720	-.0650	-.0740	-.0740		
105.000				-.0610	-.0590	-.0650	-.0810	-.0750		
115.000									-.0310	
120.000		-.0710	-.0800	.0110	-.0600	-.0650	-.0890	-.0770	-.0630	
135.000				.1040	.0820	-.0670	-.0730	-.0640		
150.000		-.0990	-.0980	-.0740	-.0770	-.1030	-.0930	-.0800		
165.000		-.1040		-.0790	-.0640	-.0780	-.0850	-.0810		
180.000		-.1020	-.0930	-.0750						

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC01) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

BETAT = .000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 ALPHAT(1) = -8.100

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1210	-.1260	-.1260	-.1240	-.1250	-.1210	-.1370	-.1590	-.1460

MACH (1) = 2.498 ALPHAT(2) = -6.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1230	-.1300	-.1290	-.1290	-.1250	-.1270	-.1380	-.1580	-.1460

MACH (1) = 2.498 ALPHAT(3) = -4.030

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1330	-.1350	-.1360	-.1360	-.1330	-.1340	-.1470	-.1640	-.1510

MACH (1) = 2.498 ALPHAT(4) = -2.000

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1380	-.1410	-.1390	-.1390	-.1330	-.1380	-.1480	-.1640	-.1530

MACH (1) = 2.498 ALPHAT(5) = .000

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1370	-.1410	-.1410	-.1430	-.1330	-.1390	-.1480	-.1650	-.1530

MACH (1) = 2.498 ALPHAT(6) = 1.930

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1410	-.1430	-.1430	-.1470	-.1380	-.1420	-.1490	-.1630	-.1570

MACH (1) = 2.498 ALPHAT(7) = 3.900

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1440	-.1450	-.1450	-.1450	-.1380	-.1440	-.1510	-.1650	-.1580

MACH (1) = 2.498 ALPHAT(8) = 5.950

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1390	-.1430	-.1440	-.1440	-.1370	-.1400	-.1460	-.1650	-.1570

MACH (1) = 2.498 ALPHAT(9) = 8.010

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1470	-.1490	-.1470	-.1470	-.1390	-.1450	-.1510	-.1710	-.1580

MACH (2) = 2.999 ALPHAT(1) = -8.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0880	-.0900	-.0910	-.0900	-.0930	-.0920	-.0940	-.0920	-.1010

AMES 87-707 IA9 OEA + S3 + T9 ORBITER BASE (RBNC01)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 ALPHAT(2) = -6.100

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0950	-.0950	-.0960	-.0950	-.0970	-.0990	-.0980	-.0990	-.1040

MACH (2) = 2.999 ALPHAT(3) = -4.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0930	-.0950	-.0980	-.0970	-.0980	-.0980	-.0970	-.0970	-.1030

MACH (2) = 2.999 ALPHAT(4) = -2.000

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0960	-.0960	-.0970	-.0960	-.0980	-.0980	-.0980	-.0980	-.1020

MACH (2) = 2.999 ALPHAT(5) = -.010

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0960	-.1010	-.1010	-.1010	-.1010	-.1010	-.0990	-.0990	-.1060

MACH (2) = 2.999 ALPHAT(6) = 1.930

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0980	-.1020	-.1020	-.1020	-.0990	-.0990	-.1020	-.1010	-.1050

MACH (2) = 2.999 ALPHAT(7) = 3.960

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0990	-.1040	-.1040	-.1020	-.1010	-.1010	-.1010	-.1010	-.1060

MACH (2) = 2.999 ALPHAT(8) = 5.990

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1000	-.1030	-.1060	-.1050	-.1030	-.1040	-.1030	-.1030	-.1070

MACH (2) = 2.999 ALPHAT(9) = 8.000

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1000	-.1040	-.1050	-.1030	-.1020	-.1020	-.1000	-.1000	-.1070

MACH (3) = 3.502 ALPHAT(1) = -8.080

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0690	-.0710	-.0710	-.0730	-.0740	-.0740	-.0750	-.0740	-.0720

MACH (3) = 3.502 ALPHAT(2) = -6.080

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0750	-.0750	-.0760	-.0770	-.0800	-.0800	-.0800	-.0780	-.0780

MACH (3) = 3.502 ALPHAT(3) = -4.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0750	-.0760	-.0780	-.0800	-.0800	-.0820	-.0830	-.0830	-.0830

MACH (3) = 3.502 ALPHAT(4) = -2.020

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0690	-.0720	-.0740	-.0750	-.0750	-.0750	-.0750	-.0750	-.0750

AMES 87-707 IA9 C2A + S3 + T2 ORBITER BASE (RBNC01)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (3) = 3.502 ALPHAT(5) = -.030

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0730	-.0750	-.0770	-.0775	-.0780	-.0800	-.0780	-.0780	-.0780

MACH (3) = 3.502 ALPHAT(6) = 1.950

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0800	-.0810	-.0830	-.0820	-.0850	-.0830	-.0840	-.0840	-.0830

MACH (3) = 3.502 ALPHAT(7) = 3.960

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0790	-.0820	-.0830	-.0850	-.0830	-.0840	-.0820	-.0840	-.0820

MACH (3) = 3.502 ALPHAT(8) = 5.970

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0870	-.0890	-.0890	-.0870	-.0870	-.0870	-.0850	-.0870

MACH (3) = 3.502 ALPHAT(9) = 8.010

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0780	-.0790	-.0790	-.0830	-.0780	-.0790	-.0780	-.0800	-.0790

AMES 87-707 IA9 C2A + S3 + T9 ORBITER BASE (RBNC02) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.400

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1260	-.1290	-.1290	-.1300	-.1170	-.1310	-.1490	-.1680	-.1430

MACH (1) = 2.498 BETAT (2) = -6.280

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1270	-.1290	-.1310	-.1280	-.1190	-.1300	-.1440	-.1700	-.1430

MACH (1) = 2.498 BETAT (3) = -4.170

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1240	-.1260	-.1260	-.1250	-.1190	-.1260	-.1380	-.1670	-.1420

MACH (1) = 2.498 BETAT (4) = -2.060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1220	-.1270	-.1300	-.1250	-.1200	-.1250	-.1350	-.1640	-.1440

MACH (1) = 2.498 BETAT (5) = 2.180

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1180	-.1220	-.1190	-.1200	-.1150	-.1200	-.1300	-.1490	-.1350

MACH (1) = 2.498 BETAT (6) = 4.320

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1250	-.1270	-.1230	-.1250	-.1190	-.1260	-.1380	-.1520	-.1390

MACH (1) = 2.498 BETAT (7) = 6.460

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1270	-.1290	-.1270	-.1290	-.1170	-.1280	-.1380	-.1620	-.1380

MACH (1) = 2.498 BETAT (8) = 8.590

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1300	-.1330	-.1300	-.1310	-.1210	-.1310	-.1380	-.1670	-.1410

MACH (2) = 2.999 BETAT (1) = -8.560

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0930	-.0930	-.0960	-.0950	-.0910	-.0920	-.0950	-.0950	-.0990

MACH (2) = 2.999 BETAT (2) = -6.400

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0860	-.0890	-.0920	-.0900	-.0870	-.0900	-.0900	-.0900	-.0960

AMES 87-707 IA9 OBA + S3 + T9 ORBITER BASE (RBNC02)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.250

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0990	-.0930	-.0970	-.0950	-.0910	-.0920	-.0900	-.0900	-.0970

MACH (2) = 2.999 BETAT (4) = -2.150

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0890	-.0930	-.0960	-.0930	-.0930	-.0930	-.0940	-.0940	-.0990

MACH (2) = 2.999 BETAT (5) = 2.230

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0890	-.0900	-.0910	-.0910	-.0890	-.0890	-.0890	-.0900	-.0950

MACH (2) = 2.999 BETAT (6) = 4.400

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0900	-.0920	-.0930	-.0930	-.0870	-.0870	-.0890	-.0900	-.0920

MACH (2) = 2.999 BETAT (7) = 6.580

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0880	-.0900	-.0910	-.0910	-.0880	-.0900	-.0900	-.0900	-.0920

MACH (2) = 2.999 BETAT (8) = 8.750

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0890	-.0890	-.0900	-.0910	-.0890	-.0890	-.0890	-.0900	-.0890

MACH (3) = 3.502 BETAT (1) = -8.710

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0740	-.0790	-.0830	-.0810	-.0790	-.0790	-.0800	-.0810	-.0810

MACH (3) = 3.502 BETAT (2) = -6.525

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0710	-.0750	-.0770	-.0740	-.0730	-.0750	-.0760	-.0750	-.0740

MACH (3) = 3.502 BETAT (3) = -4.330

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0710	-.0750	-.0770	-.0760	-.0740	-.0770	-.0770	-.0760	-.0770

MACH (3) = 3.502 BETAT (4) = -2.140

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0680	-.0750	-.0720	-.0710	-.0700	-.0730	-.0730	-.0730	-.0730

MACH (3) = 3.502 BETAT (5) = 2.260

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0680	-.0690	-.0710	-.0710	-.0730	-.0720	-.0730	-.0710	-.0730

MACH (3) = 3.502 BETAT (6) = 4.480

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	A									
	.000	-.0670	-.0720	-.0730	-.0740	-.0720	-.0720	-.0730	-.0740	-.0750

AMES 87-707 IA9 OBA + S3 + T9 ORBITER BASE (RBNC02)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (7) = 6.895

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0670	-.0680	-.0710	-.0720	-.0720	-.0720	-.0720	-.0730	-.0720

MACH (3) = 3.502 BETAT (8) = 8.915

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0740	-.0760	-.0780	-.0790	-.0800	-.0780	-.0780	-.0780	-.0810

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC03) (15 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -6.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1290	-.1330	-.1340	-.1340	-.1210	-.1310	-.1490	-.1720	-.1460

MACH (1) = 2.498 BETAT (2) = -6.290

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1270	-.1290	-.1320	-.1320	-.1220	-.1320	-.1450	-.1700	-.1440

MACH (1) = 2.498 BETAT (3) = -4.180

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1300	-.1300	-.1300	-.1290	-.1230	-.1310	-.1420	-.1680	-.1450

MACH (1) = 2.498 BETAT (4) = -2.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1240	-.1290	-.1290	-.1240	-.1190	-.1270	-.1380	-.1620	-.1460

MACH (1) = 2.498 BETAT (5) = 2.180

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1260	-.1280	-.1260	-.1270	-.1210	-.1260	-.1340	-.1530	-.1420

MACH (1) = 2.498 BETAT (6) = 4.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1230	-.1240	-.1250	-.1270	-.1190	-.1260	-.1350	-.1470	-.1360

MACH (1) = 2.498 BETAT (7) = 6.440

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1290	-.1310	-.1290	-.1290	-.1190	-.1300	-.1370	-.1610	-.1390

MACH (1) = 2.498 BETAT (8) = 8.570

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1300	-.1340	-.1330	-.1330	-.1180	-.1300	-.1360	-.1660	-.1410

MACH (2) = 2.999 BETAT (1) = -8.570

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0940	-.0960	-.0960	-.0960	-.0930	-.0940	-.0950	-.0950	-.0960

MACH (2) = 2.999 BETAT (2) = -6.420

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0910	-.0940	-.0960	-.0930	-.0890	-.0910	-.0930	-.0940	-.0960

AMES 87-707 IA9 C2A + S3 + T9 ORBITER BASE (RBNC03)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.260

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0960	-.0990	-.1000	-.0980	-.0940	-.0940	-.0960	-.0960	-.1010

MACH (2) = 2.999 BETAT (4) = -2.100

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0930	-.0960	-.0980	-.0970	-.0950	-.0960	-.0960	-.0970	-.1000

MACH (2) = 2.999 BETAT (5) = ^.220

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0930	-.0930	-.0950	-.0950	-.0910	-.0930	-.0930	-.0920	-.0970

MACH (2) = 2.999 BETAT (6) = 4.390

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0910	-.0930	-.0930	-.0930	-.0910	-.0910	-.0910	-.0910	-.0930

MACH (2) = 2.999 BETAT (7) = 6.560

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0860	-.0870	-.0890	-.0890	-.0850	-.0870	-.0870	-.0860	-.0870

MACH (2) = 2.999 BETAT (8) = 8.730

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0950	-.0960	-.0970	-.0960	-.0930	-.0950	.0940	-.0950	-.0960

MACH (3) = 3.502 BETAT (1) = -8.730

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0720	-.0770	-.0780	-.0760	-.0760	-.0770	-.0790	-.0780	-.0780

MACH (3) = 3.502 BETAT (2) = -6.530

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0690	-.0740	-.0760	-.0760	-.0740	-.0740	-.0740	-.0720	-.0740

MACH (3) = 3.502 BETAT (3) = -4.340

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0750	-.0770	-.0790	-.0780	-.0790	-.0790	-.0770	-.0770	-.0790

MACH (3) = 3.502 BETAT (4) = -2.140

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0720	-.0760	-.0770	-.0750	-.0770	-.0780	-.0760	-.0760	-.0780

MACH (3) = 3.502 BETAT (5) = 2.260

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0730	-.0750	-.0760	-.0760	-.0780	-.0780	-.0760	-.0750	-.0780

MACH (3) = 3.502 BETAT (6) = 4.470

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0710	-.0710	-.0710	-.0720	-.0730	-.0720	-.0750	-.0720	-.0730

AMES 87-707 IA9 CBA + S3 + T9 ORBITER BASE (RBNC03)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (7) = 6.680

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0720	-.0720	-.0730	-.0750	-.0750	-.0740	-.0760	-.0740	-.0750

MACH (3) = 3.502 BETAT (8) = 8.890

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0750	-.0760	-.0780	-.0780	-.0770	-.0780	-.0790	-.0780	-.0790

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC04) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1330	-.1370	-.1370	-.1370	-.1240	-.1340	-.1500	-.1760	-.1520

MACH (1) = 2.498 BETAT (2) = -6.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1320	-.1340	-.1350	-.1350	-.1250	-.1350	-.1430	-.1720	-.1480

MACH (1) = 2.498 BETAT (3) = -4.190

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1320	-.1350	-.1370	-.1380	-.1270	-.1350	-.1440	-.1710	-.1490

MACH (1) = 2.498 BETAT (4) = -2.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1320	-.1340	-.1350	-.1340	-.1250	-.1310	-.1410	-.1670	-.1510

MACH (1) = 2.498 BETAT (5) = 2.180

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1320	-.1370	-.1330	-.1340	-.1270	-.1340	-.1410	-.1590	-.1470

MACH (1) = 2.498 BETAT (6) = 4.300

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1330	-.1350	-.1340	-.1350	-.1240	-.1330	-.1430	-.1560	-.1430

MACH (1) = 2.498 BETAT (7) = 6.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1330	-.1360	-.1370	-.1370	-.1230	-.1350	-.1410	-.1640	-.1440

MACH (1) = 2.498 BETAT (8) = 8.550

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1330	-.1350	-.1330	-.1330	-.1210	-.1330	-.1360	-.1640	-.1440

MACH (2) = 2.999 BETAT (1) = -8.580

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0940	-.0940	-.0960	-.0940	-.0890	-.0920	-.0940	-.0920	-.1060

MACH (2) = 2.999 BETAT (2) = -6.420

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0940	-.0950	-.0980	-.0970	-.0920	-.0920	-.0940	-.0930	-.1060

AMES 87-707 IA9 OEA + S3 + T9 ORBITER BASE (RBNCD4)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.260

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0980	-.0980	-.0980	-.0980	-.0960	-.0950	-.0960	-.0960	-.1000

MACH (2) = 2.999 BETAT (4) = -2.110

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0950	-.0970	-.0990	-.0980	-.0960	-.0940	-.0960	-.0970	-.1020

MACH (2) = 2.999 BETAT (5) = 2.210

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0950	-.0980	-.0960	-.0960	-.0930	-.0960	-.0970	-.0970	-.1010

MACH (2) = 2.999 BETAT (6) = 4.380

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0960	-.0960	-.0970	-.0980	-.0960	-.0950	-.0980	-.0960	-.1010

MACH (2) = 2.999 BETAT (7) = 6.550

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0950	-.0960	-.0980	-.0980	-.0950	-.0920	-.0940	-.0950	-.0990

MACH (2) = 2.999 BETAT (8) = 8.710

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0960	-.0980	-.0950	-.0960	-.0930	-.0940	-.0940	-.0950	-.0970

MACH (3) = 3.502 BETAT (1) = -8.740

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0730	-.0760	-.0790	-.0790	-.0770	-.0760	-.0740	-.0760	-.0780

MACH (3) = 3.502 BETAT (2) = -6.540

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0730	-.0770	-.0800	-.0790	-.0770	-.0780	-.0790	-.0760	-.0770

MACH (3) = 3.502 BETAT (3) = -4.340

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0770	-.0790	-.0830	-.0830	-.0810	-.0800	-.0800	-.0800	-.0830

MACH (3) = 3.502 BETAT (4) = -2.150

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0700	-.0740	-.0750	-.0720	-.0730	-.0730	-.0740	-.0730	-.0750

MACH (3) = 3.502 BETAT (5) = 2.260

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0700	-.0710	-.0730	-.0720	-.0720	-.0740	-.0730	-.0730	-.0730

MACH (3) = 3.502 BETAT (6) = 4.460

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0720	-.0730	-.0750	-.0770	-.0740	-.0750	-.0760	-.0740	-.0770

AMES 87-707 IA9 OEA + S3 + T9 ORBITER BASE (RBNCD4)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (7) = 6.680

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0740	-.0750	-.0770	-.0770	-.0780	-.0750	-.0780	-.0770	-.0770

MACH (3) = 3.502 BETAT (8) = 8.870

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0770	-.0780	-.0790	-.0780	-.0700	-.0780	-.0780	-.0780	-.0790

AMES 87-757 IA9 OEA + S3 + T9 ORBITER BASE (RBNCU3) (15 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -2.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1390	-.1400	-.1410	-.1410	-.1280	-.1410	-.1520	-.1750	-.1500

MACH (1) = 2.498 BETAT (2) = -6.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1380	-.1410	-.1390	-.1400	-.1270	-.1390	-.1510	-.1750	-.1500

MACH (1) = 2.498 BETAT (3) = -4.190

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1370	-.1410	-.1410	-.1410	-.1310	-.1400	-.1500	-.1700	-.1550

MACH (1) = 2.498 BETAT (4) = -2.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1350	-.1380	-.1390	-.1380	-.1330	-.1370	-.1480	-.1680	-.1540

MACH (1) = 2.498 BETAT (5) = 2.150

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1340	-.1390	-.1370	-.1370	-.1290	-.1370	-.1430	-.1580	-.1470

MACH (1) = 2.498 BETAT (6) = 4.300

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1360	-.1390	-.1390	-.1380	-.1290	-.1380	-.1420	-.1600	-.1470

MACH (1) = 2.498 BETAT (7) = 6.420

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1380	-.1370	-.1380	-.1380	-.1210	-.1380	-.1420	-.1640	-.1440

MACH (1) = 2.498 BETAT (8) = 8.540

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1340	-.1370	-.1370	-.1380	-.1210	-.1350	-.1390	-.1610	-.1450

MACH (2) = 2.999 BETAT (1) = -8.590

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1050	-.1110	-.1120	-.1100	-.1040	-.1120	-.1100	-.1290	-.1210

MACH (2) = 2.999 BETAT (2) = -6.440

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1080	-.1060	-.1070	-.1070	-.1030	-.1090	-.1110	-.1280	-.1180

AMES 87-707 IA9 OEA + S3 + T9 ORBITER BASE (RUNC59)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.270

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1040	-.1080	-.1080	-.1080	-.1050	-.1080	-.1120	-.1290	-.1170

MACH (2) = 2.999 BETAT (4) = -2.110

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1080	-.1110	-.1130	-.1130	-.1080	-.1110	-.1180	-.1320	-.1210

MACH (2) = 2.999 BETAT (5) = 2.220

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1080	-.1110	-.1120	-.1110	-.1090	-.1110	-.1180	-.1280	-.1230

MACH (2) = 2.999 BETAT (6) = 4.370

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1020	-.1040	-.1050	-.1060	-.1010	-.1030	-.1120	-.1180	-.1130

MACH (2) = 2.999 BETAT (7) = 6.530

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1050	-.1070	-.1080	-.1080	-.1030	-.1090	-.1110	-.1280	-.1140

MACH (2) = 2.999 BETAT (8) = 8.700

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1050	-.1090	-.1090	-.1060	-.1030	-.1070	-.1110	-.1240	-.1140

MACH (3) = 3.502 BETAT (1) = -8.750

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0710	-.0740	-.0760	-.0740	-.0730	-.0740	-.0740	-.0730	-.0740

MACH (3) = 3.502 BETAT (2) = -6.540

	T NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
	.000	-.0710	-.0730	-.0750	-.0740	-.0720	-.0730	-.0730	-.0700	-.0740

MACH (3) = 3.502 BETAT (3) = -4.350

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0730	-.0760	-.0780	-.0750	-.0750	-.0750	-.0780	-.0780	-.0780

MACH (3) = 3.502 BETAT (4) = -2.140

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0730	-.0770	-.0780	-.0780	-.0780	-.0780	-.0790	-.0780	-.0790

MACH (3) = 3.502 BETAT (5) = 2.280

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0720	-.0730	-.0780	-.0780	-.0740	-.0750	-.0780	-.0780	-.0790

MACH (3) = 3.502 BETAT (6) = 4.480

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0760	-.0770	-.0780	-.0780	-.0780	-.0740	-.0780	-.0740	-.0790

AMES 87-707 IA9 OEA + S3 + T9 ORBITER BASE (RBNC09)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (7) = 6.660

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0780	-.0780	-.0800	-.0790	-.0780	-.0800	-.0780	-.0790	-.0790

MACH (3) = 3.502 BETAT (8) = 8.880

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0750	-.0790	-.0780	-.0790	-.0780	-.0790	-.0780	-.0790	-.0790

AMES 87-707 IA9 OBA + S3 + T9 ORBITER BASE (RBNCU8) (21 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5330 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE

DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1430	-.1450	-.1460	-.1460	-.1310	-.1460	-.1530	-.1730	-.1990

MACH (1) = 2.498 BETAT (2) = -6.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1410	-.1450	-.1450	-.1430	-.1270	-.1420	-.1520	-.1740	-.1990

MACH (1) = 2.498 BETAT (3) = -4.190

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1410	-.1460	-.1430	-.1460	-.1330	-.1410	-.1520	-.1740	-.1970

MACH (1) = 2.498 BETAT (4) = -2.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1380	-.1410	-.1410	-.1410	-.1310	-.1390	-.1470	-.1710	-.1930

MACH (1) = 2.498 BETAT (5) = 2.170

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1360	-.1410	-.1410	-.1410	-.1340	-.1410	-.1420	-.1570	-.1920

MACH (1) = 2.498 BETAT (6) = 4.290

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1410	-.1420	-.1410	-.1420	-.1300	-.1420	-.1450	-.1630	-.1480

MACH (1) = 2.498 BETAT (7) = 6.410

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1430	-.1440	-.1450	-.1450	-.1280	-.1440	-.1460	-.1640	-.1510

MACH (1) = 2.498 BETAT (8) = 8.540

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1410	-.1410	-.1410	-.1400	-.1280	-.1430	-.1410	-.1610	-.1480

MACH (2) = 2.999 BETAT (1) = -8.590

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1070	-.1090	-.1110	-.1110	-.1040	-.1130	-.1090	-.1250	-.1180

MACH (2) = 2.999 BETAT (2) = -6.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1090	-.1110	-.1110	-.1110	-.1070	-.1130	-.1130	-.1270	-.1210

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC06)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.270

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1080	-.1110	-.1130	-.1110	-.1050	-.1110	-.1150	-.1290	-.1190

MACH (2) = 2.999 BETAT (4) = -2.110

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1050	-.1090	-.1110	-.1090	-.1070	-.1100	-.1160	-.1270	-.1180

MACH (2) = 2.999 BETAT (5) = 2.210

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1040	-.1070	-.1090	-.1090	-.1050	-.1070	-.1140	-.1220	-.1180

MACH (2) = 2.999 BETAT (6) = 4.370

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1090	-.1100	-.1120	-.1120	-.1070	-.1120	-.1160	-.1240	-.1200

MACH (2) = 2.999 BETAT (7) = 6.530

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1060	-.1080	-.1090	-.1090	-.1030	-.1080	-.1110	-.1240	-.1140

MACH (2) = 2.995 BETAT (8) = 8.690

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1080	-.1090	-.1120	-.1120	-.1070	-.1140	-.1140	-.1250	-.1160

MACH (3) = 3.502 BETAT (1) = -8.750

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.0760	-.0770	-.0800	-.0790	-.0760	-.0760	-.0760	-.0760	-.0770

MACH (3) = 3.502 BETAT (2) = -6.550

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.0750	-.0780	-.0790	-.0790	-.0780	-.0770	-.0780	-.0780	-.0810

MACH (3) = 3.502 BETAT (3) = -4.340

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.0750	-.0780	-.0810	-.0810	-.0810	-.0790	-.0790	-.0780	-.0790

MACH (3) = 3.502 BETAT (4) = -2.150

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.0750	-.0790	-.0800	-.0800	-.0790	-.0790	-.0800	-.0810	-.0800

MACH (3) = 3.502 BETAT (5) = 2.260

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.0760	-.0760	-.0790	-.0790	-.0800	-.0810	-.0810	-.0810	-.0810

MACH (3) = 3.502 BETAT (6) = 4.450

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.0780	-.0800	-.0810	-.0810	-.0770	-.0770	-.0810	-.0810	-.0800

AMES 87-707 IA9 OA + S3 + T9 ORBITER BASE (RBNCU6)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (7) = 6.650

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0790	-.0810	-.0820	-.0800	-.0800	-.0800	-.0800	-.0800	-.0800

MACH (3) = 3.500 BETAT (8) = 8.650

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0790	-.0830	-.0810	-.0800	-.0800	-.0810	-.0800	-.0810	-.0810

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC07) (15 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHAT = 2.000 JRBINC = .000
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1500	-.1490	-.1500	-.1500	-.1350	-.1490	-.1550	-.1760	-.1620

MACH (1) = 2.498 BETAT (2) = -6.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1480	-.1500	-.1510	-.1490	-.1360	-.1480	-.1520	-.1740	-.1620

MACH (1) = 2.498 BETAT (3) = -4.190

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1440	-.1480	-.1460	-.1460	-.1360	-.1440	-.1540	-.1760	-.1620

MACH (1) = 2.498 BETAT (4) = -2.060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1430	-.1450	-.1440	-.1460	-.1350	-.1410	-.1510	-.1720	-.1580

MACH (1) = 2.498 BETAT (5) = 2.170

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1400	-.1420	-.1450	-.1450	-.1320	-.1420	-.1470	-.1600	-.1510

MACH (1) = 2.498 BETAT (6) = 4.290

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1420	-.1470	-.1450	-.1440	-.1340	-.1440	-.1470	-.1620	-.1500

MACH (1) = 2.498 BETAT (7) = 6.410

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1450	-.1480	-.1480	-.1480	-.1320	-.1480	-.1460	-.1690	-.1530

MACH (1) = 2.498 BETAT (8) = 8.540

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1460	-.1490	-.1490	-.1460	-.1330	-.1490	-.1460	-.1650	-.1520

MACH (2) = 2.999 BETAT (1) = -8.590

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1130	-.1170	-.1160	-.1170	-.1090	-.1180	-.1130	-.1280	-.1240

MACH (2) = 2.999 BETAT (2) = -6.420

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1130	-.1130	-.1160	-.1140	-.1080	-.1150	-.1170	-.1280	-.1240

AMES 87-707 IA9 02A + S3 + T9 ORBITER BASE (RBNC07)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.270

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1140	-.1140	-.1160	-.1160	-.1130	-.1160	-.1220	-.1310	-.1230

MACH (2) = 2.999 BETAT (4) = -2.110

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1100	-.1130	-.1130	-.1120	-.1110	-.1140	-.1190	-.1310	-.1200

MACH (2) = 2.999 BETAT (5) = 2.210

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1090	-.1120	-.1110	-.1140	-.1110	-.1120	-.1190	-.1230	-.1190

MACH (2) = 2.999 BETAT (6) = 4.370

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1120	-.1140	-.1160	-.1140	-.1110	-.1140	-.1190	-.1250	-.1210

MACH (2) = 2.999 BETAT (7) = 6.530

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1070	-.1110	-.1140	-.1110	-.1060	-.1110	-.1140	-.1260	-.1150

MACH (2) = 2.999 BETAT (8) = 8.690

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1080	-.1120	-.1110	-.1120	-.1060	-.1130	-.1120	-.1240	-.1150

MACH (3) = 3.502 BETAT (1) = -8.730

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0790	-.0840	-.0820	-.0820	-.0780	-.0840	-.0860	-.0820	-.0830

MACH (3) = 3.502 BETAT (2) = -6.540

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0790	-.0840	-.0820	-.0820	-.0770	-.0840	-.0810	-.0810	-.0820

MACH (3) = 3.502 BETAT (3) = -4.340

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0770	-.0790	-.0800	-.0800	-.0810	-.0810	-.0810	-.0800	-.0800

MACH (3) = 3.502 BETAT (4) = -2.140

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0760	-.0790	-.0780	-.0760	-.0780	-.0780	-.0790	-.0790	-.0810

MACH (3) = 3.502 BETAT (5) = 2.250

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0770	-.0780	-.0770	-.0770	-.0770	-.0800	-.0800	-.0790	-.0800

MACH (3) = 3.502 BETAT (6) = 4.460

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0780	-.0780	-.0780	-.0780	-.0770	-.0780	-.0780	-.0780	-.0770

AMES 87-707 IA9 OBA + S[illegible] + T[illegible] ORBITER BASE (RBNCU7)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (7) = 6.66[illegible]

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0800	-.0830	-.0820	-.0820	-.0810	-.0830	-.0830	-.0820	-.0820

MACH (3) = 3.502 BETAT (8) = 8.85[illegible]

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0770	-.0790	-.0790	-.0820	-.0790	-.0790	-.0790	-.0790	-.0810

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC08) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1550	-.1570	-.1580	-.1570	-.1420	-.1550	-.1520	-.1790	-.1680

MACH (1) = 2.498 BETAT (2) = -6.390

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1490	-.1520	-.1520	-.1520	-.1390	-.1510	-.1530	-.1740	-.1620

MACH (1) = 2.498 BETAT (3) = -4.190

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1460	-.1480	-.1470	-.1460	-.1370	-.1450	-.1540	-.1730	-.1660

MACH (1) = 2.498 BETAT (4) = -2.070

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1420	-.1450	-.1460	-.1440	-.1360	-.1430	-.1510	-.1710	-.1570

MACH (1) = 2.498 BETAT (5) = 2.170

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1420	-.1450	-.1450	-.1450	-.1390	-.1440	-.1470	-.1620	-.1530

MACH (1) = 2.498 BETAT (6) = 4.300

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1460	-.1500	-.1480	-.1460	-.1380	-.1470	-.1490	-.1650	-.1570

MACH (1) = 2.498 BETAT (7) = 6.420

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1500	-.1520	-.1540	-.1530	-.1400	-.1510	-.1500	-.1700	-.1590

MACH (1) = 2.498 BETAT (8) = 8.550

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1520	-.1540	-.1540	-.1530	-.1380	-.1540	-.1510	-.1690	-.1580

MACH (2) = 2.999 BETAT (1) = -8.580

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1130	-.1150	-.1160	-.1170	-.1080	-.1160	-.1110	-.1250	-.1230

MACH (2) = 2.999 BETAT (2) = -6.420

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1110	-.1150	-.1150	-.1150	-.1110	-.1150	-.1150	-.1270	-.1230

AMES 07-707 IA9 C2A + S3 + T9 ORBITER BASE (RBNC08)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.260

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1110	-.1120	-.1150	-.1140	-.1110	-.1140	-.1190	-.1280	-.1210

MACH (2) = 2.999 BETAT (4) = -2.100

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1100	-.1120	-.1120	-.1130	-.1110	-.1130	-.1170	-.1260	-.1210

MACH (2) = 2.999 BETAT (5) = 2.210

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1100	-.1130	-.1150	-.1140	-.1100	-.1140	-.1210	-.1230	-.1180

MACH (2) = 2.999 BETAT (6) = 4.370

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1150	-.1180	-.1160	-.1150	-.1130	-.1150	-.1220	-.1270	-.1220

MACH (2) = 2.999 BETAT (7) = 6.540

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1120	-.1140	-.1140	-.1140	-.1110	-.1140	-.1160	-.1270	-.1250

MACH (2) = 2.999 BETAT (8) = 8.710

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1160	-.1190	-.1180	-.1170	-.1150	-.1180	-.1170	-.1270	-.1220

MACH (3) = 3.502 BETAT (1) = -8.720

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0800	-.0830	-.0830	-.0840	-.0800	-.0820	-.0810	-.0850	-.0810

MACH (3) = 3.502 BETAT (2) = -6.530

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0770	-.0800	-.0810	-.0810	-.0800	-.0800	-.0790	-.0780	-.0820

MACH (3) = 3.502 BETAT (3) = -4.330

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0790	-.0830	-.0830	-.0830	-.0800	-.0790	-.0810	-.0820	-.0830

MACH (3) = 3.502 BETAT (4) = -2.140

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0740	-.0760	-.0780	-.0780	-.0780	-.0770	-.0780	-.0770	-.0800

MACH (3) = 3.502 BETAT (5) = 2.260

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0800	-.0820	-.0830	-.0820	-.0830	-.0820	-.0820	-.0830	-.0840

MACH (3) = 3.502 BETAT (6) = 4.460

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0830	-.0850	-.0840	-.0850	-.0810	-.0810	-.0810	-.0840	-.0850

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC08)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (3) = 2.502 BETAT (7) = 6.68

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0820	-.0840	-.0840	-.0850	-.0820	-.0830	-.0830	-.0820	-.0830

MACH (3) = 3.502 BETAT (8) = 8.00

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0850	-.0850	-.0850	-.0840	-.0840	-.0820	-.0850	-.0850	-.0850

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC09) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.410

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1570	-.1600	-.1600	-.1600	-.1450	-.1570	-.1510	-.1760	-.1650

MACH (1) = 2.498 BETAT (2) = -6.290

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1530	-.1560	-.1560	-.1550	-.1420	-.1530	-.1560	-.1770	-.1650

MACH (1) = 2.498 BETAT (3) = -4.170

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1480	-.1520	-.1520	-.1520	-.1440	-.1470	-.1570	-.1730	-.1600

MACH (1) = 2.498 BETAT (4) = -2.060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1410	-.1430	-.1440	-.1430	-.1350	-.1410	-.1470	-.1680	-.1560

MACH (1) = 2.498 BETAT (5) = 2.180

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1420	-.1460	-.1470	-.1470	-.1390	-.1440	-.1470	-.1620	-.1560

MACH (1) = 2.498 BETAT (6) = 4.300

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1470	-.1510	-.1500	-.1490	-.1400	-.1490	-.1510	-.1660	-.1580

MACH (1) = 2.498 BETAT (7) = 6.440

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1500	-.1510	-.1530	-.1520	-.1420	-.1530	-.1540	-.1700	-.1580

MACH (1) = 2.498 BETAT (8) = 8.570

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1540	-.1550	-.1560	-.1550	-.1430	-.1580	-.1560	-.1710	-.1610

MACH (2) = 2.999 BETAT (1) = -8.560

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1160	-.1190	-.1180	-.1170	-.1110	-.1190	-.1150	-.1260	-.1250

MACH (2) = 2.999 BETAT (2) = -6.400

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1160	-.1180	-.1170	-.1180	-.1120	-.1180	-.1140	-.1260	-.1230

AMES 87-707 IA9 02A + S3 + T9 ORBITER BASE (RBNC09)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.25

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1140	-.1160	-.1180	-.1160	-.1130	-.1140	-.1180	-.1280	-.1230

MACH (2) = 2.999 BETAT (4) = -2.11

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1070	-.1090	-.1120	-.1120	-.1080	-.1100	-.1160	-.1260	-.1200

MACH (2) = 2.999 BETAT (5) = 2.21

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1070	-.1090	-.1090	-.1120	-.1060	-.1110	-.1130	-.1190	-.1130

MACH (2) = 2.999 BETAT (6) = 4.38

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1160	-.1170	-.1190	-.1200	-.1150	-.1190	-.1220	-.1280	-.1240

MACH (2) = 2.999 BETAT (7) = 6.55

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1180	-.1180	-.1180	-.1180	-.1120	-.1180	-.1190	-.1310	-.1220

MACH (2) = 2.999 BETAT (8) = 8.72

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1170	-.1190	-.1190	-.1180	-.1120	-.1190	-.1160	-.1250	-.1230

MACH (3) = 3.502 BETAT (1) = -8.71

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0850	-.0840	-.0840	-.0840	-.0810	-.0840	-.0840	-.0820	-.0840

MACH (3) = 3.502 BETAT (2) = -6.51

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0850	-.0870	-.0860	-.0860	-.0850	-.0840	-.0850	-.0840	-.0860

MACH (3) = 3.502 BETAT (3) = -4.32

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0810	-.0840	-.0840	-.0840	-.0840	-.0830	-.0830	-.0820	-.0840

MACH (3) = 3.502 BETAT (4) = -2.13

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0790	-.0800	-.0810	-.0790	-.0790	-.0780	-.0790	-.0810	-.0820

MACH (3) = 3.502 BETAT (5) = 2.26

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0790	-.0810	-.0810	-.0830	-.0800	-.0790	-.0810	-.0810	-.0830

MACH (3) = 3.502 BETAT (6) = 4.47

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0820	-.0830	-.0840	-.0830	-.0820	-.0810	-.0810	-.0830	-.0840

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNCU9)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (7) = 6.670

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0790	-.0845	-.1840	-.0850	-.0820	-.0820	-.0850	-.0820	-.1840

MACH (3) = 3.502 BETAT (8) = 8.880

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0850	-.1860	-.1860	-.1850	-.1850	-.1840	-.1850	-.1840	-.1850

AMES 87-70/ IA9 O2A + S3 + T9 ORBITER BASE (RBNC10) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.380

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1590	-.1600	-.1600	-.1590	-.1470	-.1590	-.1500	-.1690	-.1670

MACH (1) = 2.498 BETAT (2) = -6.270

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1490	-.1540	-.1540	-.1540	-.1420	-.1510	-.1480	-.1690	-.1610

MACH (1) = 2.498 BETAT (3) = -4.170

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1440	-.1490	-.1490	-.1490	-.1420	-.1490	-.1510	-.1720	-.1570

MACH (1) = 2.498 BETAT (4) = -2.060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1450	-.1470	-.1470	-.1480	-.1410	-.1450	-.1530	-.1700	-.1560

MACH (1) = 2.498 BETAT (5) = 2.180

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1440	-.1470	-.1480	-.1450	-.1370	-.1460	-.1500	-.1620	-.1570

MACH (1) = 2.498 BETAT (6) = 4.320

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1510	-.1510	-.1510	-.1510	-.1430	-.1510	-.1510	-.1660	-.1600

MACH (1) = 2.498 BETAT (7) = 6.450

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1550	-.1590	-.1600	-.1590	-.1470	-.1590	-.1600	-.1750	-.1640

MACH (1) = 2.498 BETAT (8) = 8.580

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1570	-.1620	-.1600	-.1560	-.1440	-.1600	-.1600	-.1770	-.1630

MACH (2) = 2.999 BETAT (1) = -8.540

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1190	-.1210	-.1220	-.1200	-.1150	-.1210	-.1170	-.1250	-.1250

MACH (2) = 2.999 BETAT (2) = -6.390

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1160	-.1190	-.1170	-.1170	-.1120	-.1190	-.1140	-.1250	-.1230

AMES 87-707 IA9 OBA + S3 + T9 ORBITER BASE (RBNC10)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.240

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1130	-.1160	-.1150	-.1160	-.1110	-.1150	-.1170	-.1270	-.1210

MACH (2) = 2.999 BETAT (4) = -2.090

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1120	-.1140	-.1160	-.1160	-.1100	-.1140	-.1180	-.1300	-.1240

MACH (2) = 2.999 BETAT (5) = 2.230

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1120	-.1140	-.1150	-.1160	-.1110	-.1150	-.1150	-.1250	-.1190

MACH (2) = 2.999 BETAT (6) = 4.400

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1130	-.1150	-.1160	-.1160	-.1090	-.1140	-.1160	-.1260	-.1170

MACH (2) = 2.999 BETAT (7) = 6.575

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1190	-.1200	-.1220	-.1220	-.1150	-.1190	-.1210	-.1300	-.1230

MACH (2) = 2.999 BETAT (8) = 8.740

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1190	-.1230	-.1210	-.1190	-.1130	-.1220	-.1220	-.1300	-.1230

MACH (3) = 3.502 BETAT (1) = -8.690

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0850	-.0870	-.0890	-.0890	-.0870	-.0850	-.0840	-.0860	-.0870

MACH (3) = 3.502 BETAT (2) = -6.500

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0830	-.0860	-.0840	-.0850	-.0810	-.0820	-.0820	-.0840	-.0820

MACH (3) = 3.502 BETAT (3) = -4.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0810	-.0840	-.0810	-.0840	-.0840	-.0820	-.0800	-.0810	-.0810

MACH (3) = 3.502 BETAT (4) = -2.130

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0750	-.0780	-.0780	-.0770	-.0760	-.0780	-.0780	-.0770	-.0780

MACH (3) = 3.502 BETAT (5) = 2.260

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0750	-.0780	-.0780	-.0780	-.0780	-.0780	-.0760	-.0780	-.0780

MACH (3) = 3.502 BETAT (6) = 4.480

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0830	-.0830	-.0850	-.0830	-.0840	-.0850	-.0830	-.0850

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC1D)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (7) = 6.690

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0810	-.0850	-.0850	-.0820	-.0800	-.0790	-.0810	-.0810	-.0830

MACH (3) = 3.502 BETAT (8) = 8.900

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0830	-.0860	-.0840	-.0840	-.0800	-.0830	-.0830	-.0830	-.0850

AMES 87-707 IA9 02A + S3 + T9 ORBITER BASE (RBNC11) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .000
RUDDER = -15.000 ELEVON = .000
RUDFLP = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.390

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A		.000	-.1190	-.1220	-.1240	-.1240	-.1150	-.1250	-.1410	-.1640	-.1370

MACH (1) = 2.498 BETAT (2) = -6.270

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A		.000	-.1210	-.1250	-.1280	-.1260	-.1150	-.1260	-.1390	-.1660	-.1420

MACH (1) = 2.498 BETAT (3) = -4.160

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A		.000	-.1170	-.1230	-.1240	-.1220	-.1140	-.1190	-.1340	-.1640	-.1380

MACH (1) = 2.498 BETAT (4) = .160

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A		.000	-.1180	-.1230	-.1230	-.1200	-.1200	-.1200	-.1320	-.1550	-.1410

MACH (1) = 2.498 BETAT (5) = 4.330

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A		.000	-.1200	-.1230	-.1190	-.1020	-.1150	-.1200	-.1330	-.1460	-.1340

MACH (1) = 2.498 BETAT (6) = 6.480

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A		.000	-.1210	-.1270	-.1230	-.1240	-.1130	-.1230	-.1310	-.1560	-.1350

MACH (1) = 2.498 BETAT (7) = 8.630

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A		.000	-.1230	-.1280	-.1270	-.1260	-.1160	-.1260	-.1310	-.1580	-.1370

MACH (2) = 2.999 BETAT (1) = -8.560

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A		.000	-.0980	-.1020	-.1030	-.1030	-.0990	-.1070	-.1090	-.1250	-.1140

MACH (2) = 2.999 BETAT (2) = -6.410

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A		.000	-.0950	-.0960	-.0990	-.0990	-.0960	-.1020	-.1030	-.1220	-.1150

MACH (2) = 2.999 BETAT (3) = -4.260

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A		.000	-.0970	-.1000	-.1040	-.1040	-.0970	-.1000	-.1040	-.1250	-.1190

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC11)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = .050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0940	-.0950	-.0970	-.0960	-.0980	-.0970	-.1030	-.1180	-.1070

MACH (2) = 2.999 BETAT (5) = 4.450

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0940	-.0960	-.0960	-.0980	-.0960	-.0950	-.1050	-.1160	-.1070

MACH (2) = 2.999 BETAT (6) = 6.580

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0960	-.0960	-.0970	-.0970	-.0980	-.0980	-.1060	-.1220	-.1050

MACH (2) = 2.999 BETAT (7) = 8.750

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0960	-.0980	-.0980	-.1000	-.0980	-.0960	-.1040	-.1220	-.1070

MACH (3) = 3.502 BETAT (1) = -8.710

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0750	-.0800	-.0820	-.0820	-.0820	-.0820	-.0850	-.0940	-.0840

MACH (3) = 3.502 BETAT (2) = -6.520

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0780	-.0800	-.0830	-.0810	-.0790	-.0830	-.0820	-.0950	-.0850

MACH (3) = 3.502 BETAT (3) = -4.330

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0750	-.0760	-.0780	-.0780	-.0770	-.0790	-.0830	-.0930	-.0830

MACH (3) = 3.502 BETAT (4) = .050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0760	-.0790	-.0810	-.0810	-.0810	-.0780	-.0850	-.0960	-.0870

MACH (3) = 3.502 BETAT (5) = 4.470

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0770	-.0770	-.0800	-.0830	-.0800	-.0780	-.0840	-.0930	-.0870

MACH (3) = 3.502 BETAT (6) = 6.690

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0790	-.0800	-.0820	-.0820	-.0810	-.0790	-.0840	-.0990	-.0880

MACH (3) = 3.502 BETAT (7) = 8.900

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0810	-.0830	-.0840	-.0850	-.0850	-.0830	-.0870	-.0980	-.0920

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC12) (15 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0900 SCALE

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1310	-.1330	-.1350	-.1330	-.1190	-.1310	-.1460	-.1700	-.1490

MACH (1) = 2.498 BETAT (2) = -6.300

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1290	-.1330	-.1320	-.1310	-.1190	-.1330	-.1440	-.1700	-.1460

MACH (1) = 2.498 BETAT (3) = -4.180

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1280	-.1290	-.1310	-.1300	-.1220	-.1300	-.1400	-.1650	-.1450

MACH (1) = 2.498 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1250	-.1260	-.1260	-.1270	-.1180	-.1210	-.1330	-.1540	-.1420

MACH (1) = 2.498 BETAT (5) = 4.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1290	-.1310	-.1300	-.1310	-.1200	-.1280	-.1370	-.1520	-.1430

MACH (1) = 2.498 BETAT (6) = 6.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1310	-.1340	-.1330	-.1340	-.1250	-.1330	-.1380	-.1620	-.1440

MACH (1) = 2.498 BETAT (7) = 8.560

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1270	-.1300	-.1310	-.1310	-.1180	-.1290	-.1330	-.1590	-.1400

MACH (2) = 2.999 BETAT (1) = -8.580

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1010	-.1030	-.1060	-.1030	-.0990	-.1110	-.1090	-.1220	-.1110

MACH (2) = 2.999 BETAT (2) = -6.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1040	-.1040	-.1060	-.1050	-.1020	-.1100	-.1110	-.1250	-.1100

MACH (2) = 2.999 BETAT (3) = -4.270

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A .000	-.1010	-.1050	-.1080	-.1050	-.1010	-.1060	-.1110	-.1260	-.1140

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC12)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = .050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0980	-.0990	-.1020	-.0990	-.1020	-.1020	-.1070	-.1220	-.1110

MACH (2) = 2.999 BETAT (5) = 4.380

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1000	-.1000	-.1000	-.1010	-.0990	-.1000	-.1110	-.1140	-.1080

MACH (2) = 2.999 BETAT (6) = 6.550

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0990	-.1000	-.0990	-.0990	-.0970	-.1010	-.1060	-.1220	-.1070

MACH (2) = 2.999 BETAT (7) = 8.715

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0990	-.1030	-.1020	-.1020	-.0990	-.0990	-.1040	-.1220	-.1070

MACH (3) = 3.502 BETAT (1) = -8.740

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0830	-.0840	-.0860	-.0860	-.0840	-.0890	-.0880	-.0960	-.0890

MACH (3) = 3.502 BETAT (2) = -6.540

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0880	-.0880	-.0860	-.0840	-.0880	-.0890	-.0980	-.0910

MACH (3) = 3.502 BETAT (3) = -4.350

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0860	-.0880	-.0860	-.0860	-.0880	-.0890	-.0980	-.0930

MACH (3) = 3.502 BETAT (4) = .050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0760	-.0760	-.0760	-.0770	-.0800	-.0790	-.0840	-.0910	-.0840

MACH (3) = 3.502 BETAT (5) = 4.460

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0790	-.0790	-.0810	-.0830	-.0830	-.0830	-.0840	-.0930	-.0890

MACH (3) = 3.502 BETAT (6) = 6.660

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0810	-.0820	-.0840	-.0820	-.0820	-.0820	-.0840	-.0970	-.0880

MACH (3) = 3.502 BETAT (7) = 8.860

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0860	-.0880	-.0890	-.0870	-.0860	-.0890	-.0970	-.0910

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC13) (15 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.533 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

ALPHAT = .00 ORBINC = .00
RUDDER = -15.00 ELEVON = .00
RUDFLR = .00

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.42

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.138	-.141	-.140	-.138	-.126	-.141	-.148	-.170	-.156

MACH (1) = 2.498 BETAT (2) = -6.30

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.142	-.143	-.142	-.143	-.131	-.141	-.152	-.173	-.156

MACH (1) = 2.498 BETAT (3) = -4.18

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.134	-.136	-.136	-.136	-.127	-.135	-.146	-.165	-.149

MACH (1) = 2.498 BETAT (4) = .06

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.134	-.136	-.139	-.139	-.129	-.134	-.145	-.158	-.151

MACH (1) = 2.498 BETAT (5) = 4.30

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.134	-.136	-.134	-.134	-.123	-.135	-.139	-.155	-.145

MACH (1) = 2.498 BETAT (6) = 6.42

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.134	-.136	-.137	-.135	-.122	-.137	-.139	-.159	- 143

MACH (1) = 2.498 BETAT (7) = 8.54

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.135	-.139	-.139	-.139	-.125	-.139	-.137	-.166	-.146

MACH (2) = 2.999 BETAT (1) = -8.58

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.00	9.000
A									
.000	-.105	-.105	-.107	-.107	-.100	-.109	-.107	-.122	-.114

MACH (2) = 2.999 BETAT (2) = -6.42

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.102	-.104	-.107	-.106	-.102	-.109	-.107	-.121	-.114

MACH (2) = 2.999 BETAT (3) = -4.26

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.100	-.104	-.104	-.104	-.100	-.104	-.106	-.121	-.111

AMES 87-707 IA9 02A + S3 + T9 ORBITER BASE (RBNC13)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0980	-.1010	-.1040	-.1040	-.1030	-.1030	-.1090	-.1210	-.1130

MACH (2) = 2.999 BETAT (5) = 4.380

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1050	-.1040	-.1050	-.1050	-.1030	-.1050	-.1120	-.1180	-.1110

MACH (2) = 2.999 BETAT (6) = 6.540

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1010	-.1020	-.1040	-.1030	-.0980	-.1020	-.1070	-.1200	-.1080

MACH (2) = 2.999 BETAT (7) = 8.690

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0980	-.1010	-.1010	-.1010	-.0970	-.1010	-.1030	-.1160	-.1060

MACH (3) = 3.502 BETAT (1) = -8.750

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0860	-.0880	-.0900	-.0880	-.0870	-.0930	-.0930	-.0980	-.0930

MACH (3) = 3.502 BETAT (2) = -6.550

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0830	-.0850	-.0870	-.0880	-.0840	-.0920	-.0860	-.0970	-.0920

MACH (3) = 3.502 BETAT (3) = -4.350

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0870	-.0870	-.0890	-.0870	-.0880	-.0880	-.0980	-.0940

MACH (3) = 3.502 BETAT (4) = .050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0790	-.0820	-.0830	-.0820	-.0830	-.0830	-.0850	-.0960	-.0890

MACH (3) = 3.502 BETAT (5) = 4.450

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0850	-.0850	-.0850	-.0860	-.0850	-.0850	-.0940	-.0940	-.0910

MACH (3) = 3.502 BETAT (6) = 6.650

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0860	-.0880	-.0880	-.0900	-.0870	-.0920	-.0910	-.0970	-.0930

MACH (3) = 3.502 BETAT (7) = 8.840

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0860	-.0900	-.0870	-.0870	-.0850	-.0890	-.0890	-.0980	-.0910

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC14) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.410

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1470	-.1480	-.1490	-.1500	-.1370	-.1470	-.1460	-.1720	-.1600

MACH (1) = 2.498 BETAT (2) = -6.290

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1440	-.1470	-.1480	-.1460	-.1320	-.1440	-.1500	-.1710	-.1570

MACH (1) = 2.498 BETAT (3) = -4.19

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1410	-.1420	-.1430	-.1430	-.1330	-.1410	-.1500	-.1680	-.1560

MACH (1) = 2.498 BETAT (4) = .09

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1400	-.1400	-.1410	-.1390	-.1320	-.1400	-.1450	-.1620	-.1560

MACH (1) = 2.498 BETAT (5) = 4.31

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1400	-.1430	-.1420	-.1430	-.1350	-.1460	-.1430	-.1590	-.1500

MACH (1) = 2.498 BETAT (6) = 6.43

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1410	-.1420	-.1440	-.1400	-.1280	-.1400	-.1400	-.1590	-.1490

MACH (1) = 2.498 BETAT (7) = 8.58

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1500	-.1530	-.1530	-.1540	-.1410	-.1550	-.1530	-.1690	-.1580

MACH (2) = 2.999 BETAT (1) = -8.560

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1100	-.1120	-.1130	-.1140	-.1070	-.1140	-.1080	-.1210	-.1210

MACH (2) = 2.999 BETAT (2) = -6.410

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1110	-.1110	-.1130	-.1130	-.1080	-.1120	-.1130	-.1230	-.1190

MACH (2) = 2.999 BETAT (3) = -4.250

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1080	-.1110	-.1100	-.1150	-.1070	-.1100	-.1140	-.1240	-.1190

AMES 87-757 IA9 O2A + S3 + T9 ORBITER BASE (RBNC14)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1030	-.1060	-.1070	-.1060	-.1050	-.1060	-.1080	-.1190	-.1130

MACH (2) = 2.999 BETAT (5) = 4.380

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1080	-.1110	-.1110	-.1130	-.1100	-.1130	-.1170	-.1230	-.1190

MACH (2) = 2.999 BETAT (6) = 6.550

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1080	-.1110	-.1110	-.1110	-.1080	-.1110	-.1120	-.1250	-.1180

MACH (2) = 2.999 BETAT (7) = 8.715

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1120	-.1140	-.1140	-.1130	-.1180	-.1150	-.1140	-.1260	-.1190

MACH (3) = 3.502 BETAT (1) = -8.730

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0890	-.0890	-.0930	-.0910	-.0860	-.0930	-.0920	-.0960	-.0960

MACH (3) = 3.502 BETAT (2) = -6.535

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0860	-.0890	-.0910	-.0890	-.0880	-.0930	-.0870	-.0950	-.0950

MACH (3) = 3.502 BETAT (3) = -4.345

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0890	-.0930	-.0910	-.0930	-.0890	-.0920	-.0910	-.0990	-.0970

MACH (3) = 3.502 BETAT (4) = .050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0820	-.0830	-.0850	-.0840	-.0840	-.0850	-.0890	-.0920	-.0880

MACH (3) = 3.502 BETAT (5) = 4.450

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0840	-.0850	-.0850	-.0860	-.0860	-.0900	-.0920	-.0890

MACH (3) = 3.502 BETAT (6) = 6.660

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0870	-.0880	-.0890	-.0890	-.0870	-.0870	-.0910	-.0970	-.0920

MACH (3) = 3.502 BETAT (7) = 8.860

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0920	-.0920	-.0920	-.0920	-.0910	-.0940	-.0940	-.0970	-.0960

AMES 87-757 IA9 OBA + S3 + T9 ORBITER BASE (RBNC15) (15 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0390 SCALE

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.390

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1530	-.1580	-.1570	-.1580	-.1450	-.1550	-.1500	-.1720	-.1650

MACH (1) = 2.498 BETAT (2) = -6.280

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1470	-.1470	-.1480	-.1480	-.1390	-.1480	-.1480	-.1690	-.1580

MACH (1) = 2.498 BETAT (3) = -4.160

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1450	-.1470	-.1490	-.1480	-.1380	-.1460	-.1540	-.1720	-.1560

MACH (1) = 2.498 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1370	-.1350	-.1380	-.1360	-.1320	-.1370	-.1420	-.1590	-.1510

MACH (1) = 2.498 BETAT (5) = 4.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1390	-.1420	-.1420	-.1410	-.1310	-.1420	-.1410	-.1580	-.1520

MACH (1) = 2.498 BETAT (6) = 6.440

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1450	-.1480	-.1480	-.1460	-.1350	-.1480	-.1480	-.1660	-.1530

MACH (1) = 2.498 BETAT (7) = 8.570

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1540	-.1560	-.1560	-.1550	-.1410	-.1570	-.1530	- 1720	-.1610

MACH (2) = 2.999 BETAT (1) = -8.550

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1130	-.1150	-.1130	-.1130	-.1080	-.1150	-.1120	-.1230	-.1200

MACH (2) = 2.999 BETAT (2) = -6.400

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1080	-.1110	-.1110	-.1100	-.1050	-.1090	-.1070	-.1180	-.1170

MACH (2) = 2.999 BETAT (3) = -4.240

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1070	-.1120	-.1110	-.1100	-.1060	-.1100	-.1120	-.1240	-.1190

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC15)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = .060

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1090	-.1150	-.1150	-.1090	-.1150	-.1110	-.1150	-.1230	-.1170

MACH (2) = 2.999 BETAT (5) = 4.390

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1150	-.1110	-.1110	-.1120	-.1080	-.1120	-.1170	-.1230	-.1140

MACH (2) = 2.999 BETAT (6) = 6.570

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1080	-.1110	-.1090	-.1090	-.1050	-.1110	-.1120	-.1230	-.1130

MACH (2) = 2.999 BETAT (7) = 8.730

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.1120	-.1150	-.1150	-.1150	-.1070	-.1140	-.1130	-.1230	-.1190

MACH (3) = 3.502 BETAT (1) = -8.715

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0890	-.0920	-.0910	-.0910	-.0880	-.0930	-.0920	-.0960	-.0940

MACH (3) = 3.502 BETAT (2) = -6.520

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0880	-.0890	-.0880	-.0890	-.0880	-.0930	-.0890	-.0940	-.0940

MACH (3) = 3.502 BETAT (3) = -4.330

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0860	-.0910	-.0910	-.0920	-.0890	-.0930	-.0880	-.0960	-.0950

MACH (3) = 3.502 BETAT (4) = .050

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0870	-.0900	-.0880	-.0890	-.0870	-.0890	-.0910	-.0960	-.0940

MACH (3) = 3.502 BETAT (5) = 4.480

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0870	-.0880	-.0880	-.0900	-.0880	-.0900	-.0950	-.0960	-.0920

MACH (3) = 3.502 BETAT (6) = 6.660

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0850	-.0850	-.0850	-.0860	-.0850	-.0880	-.0890	-.0940	-.0900

MACH (3) = 3.502 BETAT (7) = 8.880

	TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A										
	.000	-.0920	-.0930	-.0930	-.0920	-.0890	-.0950	-.0960	-.0980	-.0960

AMES 87-757 IA9 OEA + S3 + T9 ORBITER BASE (RBNC16) (15 MAY 73)

REFERENCE DATA

SREF = 2.421[illegible] SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0[illegible] SCALE

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .000
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.370

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1520	-.1550	-.1560	-.1550	-.1430	-.1560	-.1460	-.1630	-.1620

MACH (1) = 2.498 BETAT (2) = -6.270

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1480	-.1480	-.1480	-.1480	-.1390	-.1470	-.1450	-.1660	-.1560

MACH (1) = 2.498 BETAT (3) = -4.160

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1410	-.1420	-.1440	-.1410	-.1340	-.1410	-.1470	-.1660	-.1510

MACH (1) = 2.498 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1410	-.1430	-.1430	-.1420	-.1350	-.1420	-.1450	-.1650	-.1570

MACH (1) = 2.498 BETAT (5) = 4.330

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1430	-.1440	-.1440	-.1440	-.1350	-.1450	-.1450	-.1620	-.1540

MACH (1) = 2.498 BETAT (6) = 6.460

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1520	-.1520	-.1520	-.1520	-.1410	-.1510	-.1520	-.1710	-.1570

MACH (1) = 2.498 BETAT (7) = 8.600

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1530	-.1550	-.1550	-.1550	-.1430	-.1570	-.1550	-.1700	-.1600

MACH (2) = 2.999 BETAT (1) = -8.530

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1140	-.1140	-.1130	-.1140	-.1090	-.1140	-.1120	-.1190	-.1190

MACH (2) = 2.999 BETAT (2) = -6.380

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1140	-.1150	-.1160	-.1160	-.1100	-.1150	-.1130	-.1230	-.1220

MACH (2) = 2.999 BETAT (3) = -4.230

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A	.000	-.1110	-.1110	-.1110	-.1110	-.1060	-.1110	-.1120	-.1240	-.1160

AMES 87-707 IA9 OBA + S3 + T9 ORBITER BASE (RBNC18)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1080	-.1090	-.1090	-.1090	-.1080	-.1090	-.1140	-.1200	-.1150

MACH (2) = 2.999 BETAT (5) = 4.400

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1070	-.1110	-.1110	-.1100	-.1050	-.1100	-.1120	-.1210	-.1130

MACH (2) = 2.999 BETAT (6) = 6.580

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1110	-.1110	-.1110	-.1100	-.1040	-.1110	-.1120	-.1220	-.111[illegible]

MACH (2) = 2.999 BETAT (7) = 8.750

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1110	-.1150	-.1140	-.1120	-.1060	-.1140	-.1140	-.1230	-.1180

MACH (3) = 3.502 BETAT (1) = -8.690

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0950	-.0920	-.0910	-.0930	-.0890	-.0950	-.0910	-.0950	-.0950

MACH (3) = 3.502 BETAT (2) = -6.500

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0860	-.0880	-.0890	-.0910	-.0860	-.0900	-.0890	-.0920	-.0920

MACH (3) = 3.502 BETAT (3) = -4.320

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0860	-.0890	-.0890	-.0890	-.0870	-.0890	-.0870	-.0910	-.0940

MACH (3) = 3.502 BETAT (4) = .050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0870	-.0900	-.0890	-.0890	-.0870	-.0900	-.0910	-.0950	-.0940

MACH (3) = 3.502 BETAT (5) = 4.470

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0880	-.0910	-.0890	-.0890	-.0870	-.0910	-.0920	-.0970	-.0910

MACH (3) = 3.502 BETAT (6) = 6.680

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0870	-.0890	-.0910	-.0890	-.0860	-.0890	-.0890	-.0940	-.0930

MACH (3) = 3.502 BETAT (7) = 8.900

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0890	-.0930	-.0940	-.0940	-.0870	-.0940	-.0920	-.0980	-.0960

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC17) (10 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.3350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.390

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.124	-.127	-.126	-.126	-.116	-.131	-.145	-.167	-.141

MACH (1) = 2.499 BETAT (2) = -6.280

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.119	-.124	-.123	-.123	-.114	-.125	-.137	-.162	-.135

MACH (1) = 2.498 BETAT (3) = -4.160

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.117	-.117	-.120	-.119	-.113	-.119	-.132	-.159	-.134

MACH (1) = 2.498 BETAT (4) = .050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.116	-.121	-.119	-.117	-.118	-.116	-.133	-.152	-.139

MACH (1) = 2.498 BETAT (5) = 4.330

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.117	-.125	-.121	-.122	-.114	-.119	-.129	-.144	-.134

MACH (1) = 2.499 BETAT (6) = 6.470

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.120	-.121	-.121	-.122	-.109	-.124	-.129	-.154	-.131

MACH (1) = 2.499 BETAT (7) = 8.600

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.119	-.123	-.121	-.121	-.111	-.122	-.126	-.154	-.132

MACH (2) = 2.999 BETAT (1) = -8.545

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.092	-.094	-.095	-.094	-.093	-.101	-.103	-.119	-.103

MACH (2) = 2.999 BETAT (2) = -4.240

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.094	-.095	-.099	-.097	-.092	-.098	-.100	-.120	-.103

MACH (2) = 2.999 BETAT (3) = .140

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.091	-.094	-.094	-.094	-.096	-.094	-.101	-.117	-.100

AMES 87-757 IA9 02A + S3 + T9 ORBITER BASE (RBNIC17)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = 4.415

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0920	-.0940	-.0980	-.0940	-.0920	-.0930	-.1020	-.1140	-.1550

MACH (2) = 2.999 BETAT (5) = 8.795

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0930	-.0940	-.0950	-.0970	-.0950	-.0940	-.0990	-.1160	-.1550

MACH (3) = 3.502 BETAT (1) = -8.795

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0750	-.0830	-.0850	-.0820	-.0810	-.0830	-.0870	-.0980	-.1350

MACH (3) = 3.502 BETAT (2) = -6.515

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0720	-.0760	-.0750	-.0750	-.0740	-.0770	-.0780	-.0920	-.0780

MACH (3) = 3.502 BETAT (3) = -4.325

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0740	-.0770	-.0790	-.0750	-.0750	-.0770	-.0820	-.0920	-.0820

MACH (3) = 3.502 BETAT (4) = .150

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0740	-.0730	-.0740	-.0760	-.0790	-.0750	-.0830	-.0910	-.0830

MACH (3) = 3.502 BETAT (5) = 4.495

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0710	-.0720	-.0740	-.0740	-.0760	-.0690	-.0790	-.0890	-.0840

MACH (3) = 3.502 BETAT (6) = 6.755

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0710	-.0720	-.0730	-.0730	-.0720	-.0710	-.0760	-.0860	-.0840

MACH (3) = 3.502 BETAT (7) = 8.915

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0740	-.0750	-.0750	-.0780	-.0770	-.0760	-.0790	-.0910	-.0810

AMES 87-707 IA9 02A + 53 + T9 ORBITER BASE (RBNC18) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.420

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1280	-.1300	-.1310	-.1290	-.1160	-.1270	-.1430	-.1670	-.1440

MACH (1) = 2.498 BETAT (2) = -6.300

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1280	-.1300	-.1320	-.1310	-.1210	-.1310	-.1430	-.1660	-.1460

MACH (1) = 2.499 BETAT (3) = -4.180

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1300	-.1300	-.1330	-.1310	-.1240	-.1320	-.1430	-.1670	-.1460

MACH (1) = 2.499 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1220	-.1250	-.1270	-.1250	-.1210	-.1230	-.1340	-.1510	-.1420

MACH (1) = 2.498 BETAT (5) = 4.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1250	-.1280	-.1280	-.1270	-.1190	-.1260	-.1340	-.1490	-.1380

MACH (1) = 2.498 BETAT (6) = 6.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1290	-.1300	-.1280	-.1300	-.1200	-.1300	-.1330	-.1560	-.1360

MACH (1) = 2.498 BETAT (7) = 8.560

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.1270	-.1320	-.1300	-.1290	-.1190	-.1290	-.1330	-.1610	-.1370

MACH (2) = 2.999 BETAT (1) = -8.580

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.0970	-.1000	-.1030	-.1010	-.0940	-.1050	-.1160	-.1290	-.1150

MACH (2) = 2.999 BETAT (2) = -4.260

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.0980	-.1000	-.1020	-.1020	-.0990	-.1050	-.1070	-.1230	-.1110

MACH (2) = 2.999 BETAT (3) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
	.000	-.0960	-.0990	-.1000	-.0980	-.0980	-.1010	-.1060	-.1210	-.1090

AMES 87-707 IA9 02A + S3 + T9 ORBITER BASE (RBNC10)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = 4.39

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1980	-.1990	-.1990	-.1910	-.1980	-.1990	-.1980	-.1130	-.1150

MACH (2) = 2.999 BETAT (5) = 8.72

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1990	-.1910	-.1920	-.1920	-.0970	-.1910	-.1130	-.1180	-.1960

MACH (3) = 3.502 BETAT (1) = -8.73

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1860	-.1810	-.1850	-.1850	-.1850	-.1870	-.1870	-.1950	-.1990

MACH (3) = 3.502 BETAT (2) = -6.53

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1790	-.1820	-.1810	-.1780	-.1780	-.1840	-.1840	-.1920	-.1840

MACH (3) = 3.502 BETAT (3) = -4.33

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1760	-.1770	-.1810	-.1770	-.1760	-.1780	-.1830	-.1900	-.1850

MACH (3) = 3.502 BETAT (4) = .16

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1790	-.1750	-.1760	-.1760	-.1760	-.1770	-.1830	-.1920	-.1820

MACH (3) = 3.502 BETAT (5) = 4.47

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1770	-.1770	-.1790	-.1770	-.1780	-.1780	-.1830	-.1880	-.1860

MACH (3) = 3.502 BETAT (6) = 8.67

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1770	-.1770	-.1780	-.1800	-.1790	-.1790	-.1810	-.1910	-.1850

MACH (3) = 3.502 BETAT (7) = 8.87

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1780	-.1790	-.1810	-.1810	-.1810	-.1840	-.1890	-.1910	-.1860

AMES 87-707 IA9 C2A + S3 + T9 ORBITER BASE (RBNC19) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1370	-.1390	-.1380	-.1370	-.1220	-.1390	-.1470	-.1690	-.1520

MACH (1) = 2.499 BETAT (2) = -6.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1380	-.1370	-.1400	-.1390	-.1240	-.1380	-.1470	-.1690	-.1520

MACH (1) = 2.499 BETAT (3) = -4.180

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1320	-.1360	-.1370	-.1370	-.1260	-.1370	-.1430	-.1680	-.1500

MACH (1) = 2.499 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1320	-.1370	-.1360	-.1370	-.1290	-.1340	-.1430	-.1680	-.1500

MACH (1) = 2.499 BETAT (5) = 4.300

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1350	-.1380	-.1400	-.1380	-.1260	-.1370	-.1410	-.1580	-.1480

MACH (1) = 2.499 BETAT (6) = 6.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1330	-.1360	-.1370	-.1350	-.1230	-.1350	-.1360	-.1560	-.1430

MACH (1) = 2.498 BETAT (7) = 8.550

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1350	-.1360	-.1370	-.1350	-.1220	-.1360	-.1360	-.1600	-.1430

MACH (2) = 2.999 BETAT (1) = -8.580

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1010	-.1030	-.1060	-.1040	-.0980	-.1080	-.1040	-.1260	-.1120

MACH (2) = 2.999 BETAT (2) = -4.260

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1020	-.1030	-.1060	-.1060	-.1000	-.1060	-.1080	-.1220	-.1120

MACH (2) = 2.999 BETAT (3) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0990	-.1010	-.1020	-.1020	-.1010	-.1020	-.1080	-.1210	-.1130

AMES 87-707 IA9 OBA + S3 + T9 ORBITER BASE (RBNC19)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = 4.380

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1030	-.1050	-.1050	-.1050	-.1020	-.1050	-.1100	-.1150	-.1120

MACH (2) = 2.999 BETAT (5) = 8.719

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1020	-.1050	-.1050	-.1050	-.1000	-.1040	-.1040	-.1180	-.1090

MACH (3) = 3.502 BETAT (1) = -8.740

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0860	-.0860	-.0840	-.0810	-.0890	-.0870	-.0950	-.0910

MACH (3) = 3.502 BETAT (2) = -6.540

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0800	-.0810	-.0810	-.0810	-.0790	-.0860	-.0810	-.0900	-.0850

MACH (3) = 3.502 BETAT (3) = -4.340

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0810	-.0810	-.0810	-.0820	-.0800	-.0850	-.0850	-.0940	-.0870

MACH (3) = 3.502 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0770	-.0770	-.0790	-.0780	-.0780	-.0800	-.0820	-.0920	-.0840

MACH (3) = 3.502 BETAT (5) = 4.460

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0820	-.0830	-.0850	-.0850	-.0840	-.0840	-.0880	-.0920	-.0890

MACH (3) = 3.502 BETAT (6) = 6.660

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0810	-.0830	-.0860	-.0830	-.0830	-.0840	-.0880	-.0940	-.0890

MACH (3) = 3.502 BETAT (7) = 8.860

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0800	-.0820	-.0830	-.0820	-.0800	-.0850	-.0850	-.0900	-.0860

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC20) (15 MAY 73)

EFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0390 SCALE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.410

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1450	-.1470	-.1500	-.1480	-.1340	-.1470	-.1450	-.1700	-.1660

MACH (1) = 2.499 BETAT (2) = -6.290

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1410	-.1420	-.1440	-.1440	-.1290	-.1410	-.1440	-.1660	-.1540

MACH (1) = 2.499 BETAT (3) = -4.170

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1350	-.1390	-.1410	-.1400	-.1310	-.1370	-.1470	-.1640	-.1520

MACH (1) = 2.499 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1340	-.1370	-.1380	-.1360	-.1250	-.1350	-.1420	-.1560	-.1510

MACH (1) = 2.499 BETAT (5) = 4.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1360	-.1400	-.1410	-.1400	-.1330	-.1410	-.1400	-.1540	-.1480

MACH (1) = 2.499 BETAT (6) = 6.430

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1430	-.1460	-.1470	-.1440	-.1310	-.1440	-.1420	-.1630	-.1500

MACH (1) = 2.499 BETAT (7) = 8.560

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1460	-.1500	-.1480	-.1450	-.1330	-.1480	-.1450	-.1630	-.1540

MACH (2) = 2.999 BETAT (1) = -8.570

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1110	-.1110	-.1120	-.1130	-.1060	-.1140	-.1080	-.1210	-.1190

MACH (2) = 2.999 BETAT (2) = -4.250

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1070	-.1100	-.1100	-.1080	-.1060	-.1080	-.1140	-.1240	-.1180

MACH (2) = 2.999 BETAT (3) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1030	-.1070	-.1070	-.1060	-.1040	-.1070	-.1110	-.1210	-.1130

AMES 87-707 IA9 02A + S3 + T9 ORBITER BASE (RBNC20)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = 4.395

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1070	-.1070	-.1090	-.1100	-.1070	-.1090	-.1140	-.1190	-.1150

MACH (2) = 2.999 BETAT (5) = 8.729

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1110	-.1130	-.1130	-.1110	-.1060	-.1130	-.1120	-.1230	-.1160

MACH (3) = 3.502 BETAT (1) = -6.725

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0850	-.0850	-.0850	-.0810	-.0900	-.0850	-.0910	-.0900

MACH (3) = 3.502 BETAT (2) = -6.530

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0820	-.0820	-.0860	-.0850	-.0820	-.0870	-.0850	-.0910	-.0900

MACH (3) = 3.502 BETAT (3) = -4.330

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0820	-.0830	-.0850	-.0850	-.0850	-.0860	-.0850	-.0920	-.0910

MACH (3) = 3.502 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0750	-.0800	-.0850	-.0820	-.0790	-.0810	-.0830	-.0890	-.0850

MACH (3) = 3.502 BETAT (5) = 4.460

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0850	-.0860	-.0880	-.0850	-.0870	-.0910	-.0950	-.0920

MACH (3) = 3.502 BETAT (6) = 6.670

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0850	-.0870	-.0850	-.0840	-.0860	-.0900	-.0940	-.0910

MACH (3) = 3.502 BETAT (7) = 8.870

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0890	-.0860	-.0850	-.0850	-.0820	-.0870	-.0860	-.0910	-.0880

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC21) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.390

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1530	-.1530	-.1550	-.1520	-.1420	-.1520	-.1490	-.1710	-.1620

MACH (1) = 2.499 BETAT (2) = -6.280

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1490	-.1480	-.1500	-.1500	-.1400	-.1470	-.1510	-.1690	-.1590

MACH (1) = 2.499 BETAT (3) = -4.170

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1420	-.1450	-.1460	-.1440	-.1360	-.1440	-.1540	-.1670	-.1550

MACH (1) = 2.499 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1390	-.1410	-.1410	-.1410	-.1310	-.1400	-.1440	-.1610	-.1530

MACH (1) = 2.499 BETAT (5) = 4.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1420	-.1450	-.1450	-.1460	-.1380	-.1460	-.1480	-.1610	-.1540

MACH (1) = 2.498 BETAT (6) = 6.440

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1440	-.1460	-.1460	-.1460	-.1350	-.1470	-.1460	-.1640	-.1530

MACH (1) = 2.499 BETAT (7) = 8.570

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1520	-.1550	-.1540	-.1520	-.1390	-.1550	-.1520	-.1680	-.1600

MACH (2) = 2.999 BETAT (1) = -8.550

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1130	-.1160	-..170	-.1150	-.1080	-.1150	-.1130	-.1230	-.1220

MACH (2) = 2.999 BETAT (2) = -4.240

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1150	-.1130	-.1110	-.1110	-.1060	-.1100	-.1140	-.1250	-.1180

MACH (2) = 2.999 BETAT (3) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1030	-.1070	-.1070	-.1070	-.1040	-.1070	-.1100	-.1200	-.1150

AMES 87-707 IA9 O2A + S3 + T9 ORBITER BASE (RBNC21)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = 4.499

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1080	-.1100	-.1090	-.1090	-.1050	-.1110	-.1150	-.1220	-.1150

MACH (2) = 2.999 BETAT (5) = 8.730

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1100	-.1130	-.1120	-.1120	-.1050	-.1130	-.1110	-.1210	-.1150

MACH (3) = 3.502 BETAT (1) = -8.710

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0860	-.0850	-.0850	-.0820	-.0870	-.0840	-.0920	-.0890

MACH (3) = 3.502 BETAT (2) = -6.510

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0830	-.0840	-.0820	-.0830	-.0800	-.0850	-.0830	-.0880	-.0850

MACH (3) = 3.502 BETAT (3) = -4.320

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0780	-.0820	-.0830	-.0820	-.0800	-.0840	-.0800	-.0880	-.0850

MACH (3) = 3.502 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0830	-.0850	-.0830	-.0840	-.0830	-.0830	-.0860	-.0920	-.0870

MACH (3) = 3.502 BETAT (5) = 4.470

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0850	-.0880	-.0890	-.0860	-.0850	-.0880	-.0930	-.0950	-.0920

MACH (3) = 3.502 BETAT (6) = 6.670

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0820	-.0840	-.0840	-.0840	-.0810	-.0840	-.0850	-.0910	-.0870

MACH (3) = 3.502 BETAT (7) = 8.890

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0860	-.0880	-.0860	-.0860	-.0850	-.0900	-.0880	-.0910	-.0910

AMES 97-707 IA9 OBA + S3 + T9 ORBITER BASE (RBNC22) (15 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.375

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1510	-.1520	-.1510	-.1520	-.1420	-.1510	-.1460	-.1600	-.1580

MACH (1) = 2.499 BETAT (2) = -6.260

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1540	-.1530	-.1510	-.1490	-.1410	-.1500	-.1490	-.1700	-.1570

MACH (1) = 2.499 BETAT (3) = -4.150

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1420	-.1450	-.1470	-.1470	-.1390	-.1440	-.1490	-.1680	-.1540

MACH (1) = 2.499 BETAT (4) = .050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1430	-.1430	-.1450	-.1450	-.1360	-.1440	-.1480	-.1640	-.1550

MACH (1) = 2.499 BETAT (5) = 4.330

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1400	-.1430	-.1440	-.1450	-.1360	-.1450	-.1460	-.1590	-.1540

MACH (1) = 2.499 BETAT (6) = 6.450

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1450	-.1540	-.1470	-.1450	-.1340	-.1460	-.1490	-.1670	-.1540

MACH (1) = 2.499 BETAT (7) = 8.650

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1510	-.1540	-.1520	-.1530	-.1380	-.1530	-.1530	-.1710	-.1560

MACH (2) = 2.999 BETAT (1) = -8.530

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1130	-.1130	-.1150	-.1150	-.1090	-.1150	-.1090	-.1190	-.1190

MACH (2) = 2.999 BETAT (2) = -4.230

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1090	-.1120	-.1110	-.1110	-.1050	-.1090	-.1130	-.1230	-.1170

MACH (2) = 2.999 BETAT (3) = .050

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1080	-.1110	-.1090	-.1080	-.1060	-.1090	-.1120	-.1230	-.1160

AMES 87-757 IA9 C2A + S3 + T9 ORBITER BASE (RBNC22)

SECTION (1)ORBITER BASE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (4) = 4.400

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1080	-.1110	-.1110	-.1110	-.1040	-.1090	-.1120	-.1200	-.1140

MACH (2) = 2.999 BETAT (5) = 8.750

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.1140	-.1160	-.1160	-.1160	-.1070	-.1140	-.1150	-.1240	-.1200

MACH (3) = 3.502 BETAT (1) = -8.680

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0810	-.0840	-.0840	-.0850	-.0820	-.0850	-.0830	-.0890	-.0890

MACH (3) = 3.502 BETAT (2) = -6.490

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0850	-.0850	-.0860	-.0870	-.0840	-.0890	-.0860	-.0910	-.0910

MACH (3) = 3.502 BETAT (3) = -4.310

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0850	-.0870	-.0860	-.0860	-.0830	-.0890	-.0880	-.0940	-.0910

MACH (3) = 3.502 BETAT (4) = .060

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0860	-.0850	-.0870	-.0830	-.0850	-.0870	-.0940	-.0900

MACH (3) = 3.502 BETAT (5) = 4.480

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0840	-.0840	-.0880	-.0860	-.0850	-.0870	-.0890	-.0930	-.0890

MACH (3) = 3.502 BETAT (6) = 6.750

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0820	-.0830	-.0840	-.0830	-.0830	-.0860	-.0870	-.0890	-.0870

MACH (3) = 3.502 BETAT (7) = 8.910

TAP NO	1.000	2.000	3.000	4.000	5.000	6.000	7.000	8.000	9.000
A									
.000	-.0870	-.0890	-.0890	-.0860	-.0850	-.0900	-.0890	-.0940	-.0910

AMES 87-757 IA9 02A + 33 + T9 UPPER MPS NOZZLE (PBNOZ1) (15 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.535 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

BETAT = .000 OPBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLP = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 ALPHAT(1) = -8.150

X/LNP / PHI	.250	.500	.750
.000	-.131	-.131	
90.000	-.136	-.133	-.131
135.000	-.147	-.136	-.140
180.000	.176	.137	-.139
225.000	-.150	-.139	-.142
270.000	-.136	-.135	-.135

MACH (1) = 2.498 ALPHAT(2) = -6.170

X/LNP / PHI	.250	.500	.750
.000	-.140	-.140	
90.000	-.142	-.140	-.140
135.000	-.153	-.141	-.149
180.000	.129	.112	-.139
225.000	-.155	-.149	-.148
270.000	-.144	-.142	-.142

MACH (1) = 2.498 ALPHAT(3) = -4.030

X/LNP / PHI	.250	.500	.750
.000	-.145	-.147	
90.000	-.159	-.145	-.147
135.000	-.162	-.151	-.154
180.000	.585	.572	-.148
225.000	-.162	-.159	-.154
270.000	-.151	-.147	-.145

MACH (1) = 2.498 ALPHAT(4) = -2.500

X/LNP / PHI	.250	.500	.750
.000	-.159	-.159	
90.000	-.151	-.148	-.149
135.000	-.161	-.156	-.156
180.000	.553	.537	-.159
225.000	-.164	-.153	-.157
270.000	-.153	-.159	-.159

MACH (1) = 2.498 ALPHAT(5) = .000

X/LNP / PHI	.250	.500	.750
.000	-.151	-.153	
90.000	-.155	-.153	-.152
135.000	-.165	-.161	-.158
180.000	.531	.511	-.159
225.000	-.171	-.165	-.159

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND01)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 ALPHAT(5) = .000

X/LNP	.250	.500	.750
PHI			
270.000	-.1550	-.1520	-.1530

MACH (1) = 2.498 ALPHAT(6) = 1.930

X/LNP	.250	.500	.750
PHI			
.000	-.1550	-.1560	
90.000	-.1560	-.1570	-.1550
135.000	-.1710	-.1600	-.1620
180.000	.0170	-.0130	-.1560
225.000	-.1730	-.1610	-.1590
270.000	-.1590	-.1570	-.1540

MACH (1) = 2.498 ALPHAT(7) = 3.900

X/LNP	.250	.500	.750
PHI			
.000	-.1580	-.1590	
90.000	-.1610	-.1590	-.1570
135.000	-.1770	-.1600	-.1650
180.000	.0080	-.0350	-.1590
225.000	-.1750	-.1630	-.1640
270.000	-.1600	-.1590	-.1550

MACH (1) = 2.498 ALPHAT(8) = 5.950

X/LNP	.250	.500	.750
PHI			
.000	-.1560	-.1570	
90.000	-.1590	-.1590	-.1580
135.000	-.1740	-.1640	-.1600
180.000	-.0020	-.0610	-.1590
225.000	-.1760	-.1640	-.1610
270.000	-.1610	-.1590	-.1570

MACH (1) = 2.498 ALPHAT(9) = 8.010

X/LNP	.250	.500	.750
PHI			
.000	-.1590	-.1630	
90.000	-.1640	-.1610	-.1620
135.000	-.1710	-.1640	-.1650
180.000	-.0100	-.0850	-.1640
225.000	-.1760	-.1650	-.1650
270.000	-.1620	-.1630	-.1600

MACH (2) = 2.999 ALPHAT(1) = -8.070

X/LNP	.250	.500	.750
PHI			
.000	-.1070	-.1150	
90.000	-.1140	-.1140	-.1100
135.000	-.0630	-.0890	-.1140
180.000	.1750	.2090	-.1040
225.000	-.0840	-.0870	-.1160

AMES 87-757 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND01)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 ALPHAT(1) = -8.070

X/LNP	.250	.500	.750
PHI			
270.000	-.1160	-.1140	-.1130

MACH (2) = 2.999 ALPHAT(2) = -6.100

X/LNP	.250	.500	.750
PHI			
.000	-.1125	-.1160	
90.000	-.1200	-.1190	-.1170
135.000	-.0570	-.0980	-.1200
180.000	.1250	.1580	-.1080
225.000	-.0730	-.0850	-.1200
270.000	-.1220	-.1110	-.1160

MACH (2) = 2.999 ALPHAT(3) = -4.070

X/LNP	.250	.500	.750
PHI			
.000	-.1100	-.1140	
90.000	-.1170	-.1160	-.1160
135.000	-.0480	-.1070	-.1150
180.000	.0890	.1030	-.1080
225.000	-.0630	-.0900	-.1210
270.000	-.1210	-.1170	-.1170

MACH (2) = 2.999 ALPHAT(4) = -2.000

X/LNP	.250	.500	.750
PHI			
.000	-.1130	-.1200	
90.000	-.1230	-.1190	-.1180
135.000	-.0620	-.1150	-.1190
180.000	.0515	.0590	-.1140
225.000	-.0730	-.1120	-.1230
270.000	-.1210	-.1180	-.1180

MACH (2) = 2.999 ALPHAT(5) = -.010

X/LNP	.250	.500	.750
PHI			
.000	-.1170	-.1190	
90.000	-.1190	-.1170	-.1200
135.000	-.0750	-.1180	-.1220
180.000	.0430	.0460	-.1160
225.000	-.0870	-.1120	-.1230
270.000	-.1210	-.1110	-.1190

MACH (2) = 2.999 ALPHAT(6) = 1.900

X/LNP	.250	.500	.750
PHI			
.000	-.1170	-.1190	
90.000	-.1220	-.1190	-.1190
135.000	-.0940	-.1240	-.1190
180.000	.0320	.0280	-.1190
225.000	-.1060	-.1190	-.1250

AMES 87-75? IA9 ORA + S3 + T9 UPPER MPS NOZZLE (FBNDS1)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 ALPHAT(6) = 1.93

//L*P	.25	.5	.75
PHI			
27.999	-.1215	-.1195	-.1225

MACH (2) = 2.999 ALPHAT(7) = 3.96

//L*P	.25	.5	.75
PHI			
.999	-.1165	-.1195	
9.999	-.1225	-.1195	-.1225
135.999	-.1145	-.1245	-.1215
180.999	-.1195	-.1215	-.1225
225.999	-.1225	-.1225	-.1235
27?.999	-.1225	-.1225	-.1225

MACH (2) = 2.999 ALPHAT(8) = 5.99

//L*P	.25	.5	.75
PHI			
.999	-.1175	-.1215	
9.999	-.1235	-.1225	-.1235
135.999	-.1295	-.1295	-.1225
180.999	-.1345	-.1285	-.1215
225.999	-.1335	-.1225	-.1235
27?.999	-.1255	-.1225	-.1215

MACH (2) = 2.999 ALPHAT(9) = 8.99

//L*P	.25	.5	.75
PHI			
.999	-.1175	-.1245	
9.999	-.1215	-.1225	-.1225
135.999	-.1335	-.1245	-.1255
180.999	-.1315	-.1435	-.1225
225.999	-.1325	-.1225	-.1245
27?.999	-.1245	-.1225	-.1245

MACH (3) = 3.9?2 ALPHAT(1) = -8.?8

//L*P	.25	.5	.75
PHI			
.999	-.?72?	-.?87?	
9.999	-.?99?	-.?87?	-.?89?
135.999	-.?.??	-.?.9?	-.?69?
180.999	.?269	.?93?	-.?75?
225.999	-.?25?	-.?41?	-.?89?
27?.999	-.?92?	-.?8??	-.?22?

MACH (3) = 3.9?2 ALPHAT(2) = -6.?8

//L*P	.25	.5	.75
PHI			
.999	-.?84?	-.?55?	
9.999	-.?.??	-.?55?	-.?47?
135.999	-.?115	-.?55?	-.?49?
180.999	.?92?	.?215	-.?48?
225.999	.?.5?	-.?.??	-.?45?

AMES 87-707 IA9 02A + S3 + T9 UPPER MPS NOZZLE (PBND01)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 ALPHAT(2) = -6.080

X/LNP	.250	.500	.750
PHI			
270.000	-.0550	-.0470	-.0440

MACH (3) = 3.502 ALPHAT(3) = -4.575

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0970	
90.000	-.1510	-.0970	-.0960
135.000	-.1280	-.0770	-.0970
180.000	.0620	.0730	-.0890
225.000	-.0290	-.0620	-.0980
270.000	-.1000	-.0970	-.0930

MACH (3) = 3.502 ALPHAT(4) = -2.520

X/LNP	.250	.500	.750
PHI			
.000	-.0830	-.0950	
90.000	-.0960	-.0920	-.0930
135.000	-.0350	-.0800	-.0930
180.000	.0480	.0590	-.0940
225.000	-.0370	-.0610	-.0940
270.000	-.0940	-.0930	-.0880

MACH (3) = 3.502 ALPHAT(5) = -.030

X/LNP	.250	.500	.750
PHI			
.000	-.0830	-.0950	
90.000	-.0960	-.0950	-.0960
135.000	-.0440	-.0960	-.0960
180.000	.0320	.0410	-.0970
225.000	-.0460	-.0730	-.0960
270.000	-.0950	-.0940	-.0880

MACH (3) = 3.502 ALPHAT(6) = 1.950

X/LNP	.250	.500	.750
PHI			
.000	-.0890	-.0990	
90.000	-.0990	-.0980	-.1000
135.000	-.0560	-.0980	-.1000
180.000	.0320	.0410	-.0950
225.000	-.0660	-.0820	-.1000
270.000	-.0970	-.0960	-.0950

MACH (3) = 3.502 ALPHAT(7) = 3.980

X/LNP	.250	.500	.750
PHI			
.000	-.0920	-.1020	
90.000	-.1000	-.1010	-.1030
135.000	-.0730	-.0990	-.1030
180.000	.0210	.0170	-.1000
225.000	-.0880	-.0930	-.1020

AMES 87-707 IA9 OBA + 33 + T9 UPPER MPS NOZZLE (RBND%1)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 ALPHAT(7) = 3.96%

X/LNP	.25%	.50%	.75%
PHI			
27%.00%	-.1%15	-.1000	-.0990

MACH (3) = 3.502 ALPHAT(8) = 5.97%

X/LNP	.25%	.50%	.75%
PHI			
.00%	-.0920	-.1020	
9%.00%	-.1020	-.1020	-.1020
135.00%	-.0990	-.0970	-.1030
18%.00%	.0970	-.0170	-.1020
225.00%	-.1030	-.0970	-.1020
27%.00%	-.1040	-.1020	-.1000

MACH (3) = 3.502 ALPHAT(9) = 8.51%

X/LNP	.25%	.50%	.75%
PHI			
.00%	-.0990	-.0990	
9%.00%	-.0990	-.0960	-.1010
135.00%	-.1040	-.0960	-.1040
18%.00%	-.0990	-.0330	-.1000
225.00%	-.1040	-.0960	-.1000
27%.00%	-.1010	-.1020	-.0970

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (PBNOZ2) (15 MAY 73)

AMES 87-757 IA9 C2A + S3 + T9 UPPER MPS NOZZLE

REFERENCE DATA

SREF = 2.421) SQ.FT. XMRP = 28.53)) INCHES
LREF = 39.849) INCHES YMRP = .0000 INCHES
BREF = 39.849) INCHES ZMRP = .0000 INCHES
SCALE = .039) SCALE

PARAMETRIC DATA

ALPHAT = -8.000) OPBINC = .500)
RUDDER = .000) ELEVON = .000)
RUDFLP = .000)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.40)

X/LNP	.25)	.50)	.75)
PHI			
.000)	-.144)	-.148)	
9.000)	-.153)	-.151)	-.144)
135.000)	-.033)	-.098)	-.154)
180.000)	.216)	.103)	-.152)
225.000)	-.162)	-.164)	-.152)
270.000)	-.149)	-.147)	-.145)

MACH (1) = 2.498 BETAT (2) = -6.28)

X/LNP	.25)	.50)	.75)
PHI			
.000)	-.139)	-.143)	
9.000)	-.149)	-.146)	-.142)
135.000)	-.047)	-.113)	-.153)
180.000)	.211)	.012)	-.143)
225.000)	-.144)	-.152)	-.153)
270.000)	-.145)	-.142)	-.143)

MACH (1) = 2.498 BETAT (3) = -4.17)

X/LNP	.25)	.50)	.75)
PHI			
.000)	-.138)	-.143)	
9.000)	-.146)	-.145)	-.141)
135.000)	-.071)	-.143)	-.149)
180.000)	.197)	.054)	-.140)
225.000)	-.145)	-.132)	-.149)
270.000)	-.145)	-.142)	-.141)

MACH (1) = 2.498 BETAT (4) = -2.08)

X/LNP	.25)	.50)	.75)
PHI			
.000)	-.138)	-.136)	
9.000)	-.144)	-.143)	-.139)
135.000)	-.088)	-.139)	-.146)
180.000)	.269)	.085)	-.138)
225.000)	-.151)	-.125)	-.149)
270.000)	-.139)	-.138)	-.141)

MACH (1) = 2.498 BETAT (5) = 2.18)

X/LNP	.25)	.50)	.75)
PHI			
.000)	-.136)	-.136)	
9.000)	-.137)	-.134)	-.135)
135.000)	-.159)	-.117)	-.146)
180.000)	.159)	.062)	-.133)
225.000)	-.153)	-.132)	-.144)

AMES 87-707 IA9 02A + S3 + T9 UPPER MPS NOZZLE (RBND02)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNP	.250	.500	.750
PHI			
270.000	-.1410	-.1390	-.1340

MACH (1) = 2.498 BETAT (6) = 4.320

X/LNP	.250	.500	.750
PHI			
.000	-.1400	-.1430	
90.000	-.1480	-.1450	-.1430
135.000	-.1570	-.1290	-.1510
180.000	.1650	.0530	-.1460
225.000	-.0830	-.1250	-.1500
270.000	-.1480	-.1430	-.1390

MACH (1) = 2.498 BETAT (7) = 6.460

X/LNP	.250	.500	.750
PHI			
.000	-.1420	-.1430	
90.000	-.1480	-.1470	-.1440
135.000	-.1620	-.1440	-.1550
180.000	.1470	.0630	-.1510
225.000	-.0650	-.0920	-.1540
270.000	-.1480	-.1450	-.1430

MACH (1) = 2.498 BETAT (8) = 8.590

X/LNP	.250	.500	.750
PHI			
.000	-.1430	-.1470	
90.000	-.1510	-.1480	-.1470
135.000	-.1740	-.1640	-.1560
180.000	.1730	.1710	-.1640
225.000	-.0540	-.0590	-.1530
270.000	-.1560	-.1510	-.1470

MACH (2) = 2.999 BETAT (1) = -8.560

X/LNP	.250	.500	.750
PHI			
.000	-.1070	-.1110	
90.000	-.1170	-.1160	-.1110
135.000	-.1090	-.1070	-.1110
180.000	.0960	.1040	-.1110
225.000	-.1150	-.1090	-.1210
270.000	-.1130	-.1150	-.1110

MACH (2) = 2.999 BETAT (2) = -8.400

X/LNP	.250	.500	.750
PHI			
.000	-.1050	-.1070	
90.000	-.1110	-.1080	-.1080
135.000	-.0940	-.1020	-.1120
180.000	.1190	.0990	-.1120
225.000	-.1060	-.1100	-.1120

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND02)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.450

X/LNP	.250	.500	.750
PHI			
270.000	-.1110	-.1070	-.1070

MACH (2) = 2.999 BETAT (3) = -4.250

X/LNP	.250	.500	.750
PHI			
.000	-.1060	-.1110	
90.000	-.1120	-.1110	-.1100
135.000	.0630	-.0550	-.1140
180.000	.1440	.0810	-.1060
225.000	-.0920	-.0910	-.1180
270.000	-.1140	-.1120	-.1110

MACH (2) = 2.999 BETAT (4) = -2.110

X/LNP	.250	.500	.750
PHI			
.000	-.1080	-.1110	
90.000	-.1140	-.1140	-.1120
135.000	.0610	-.0700	-.1170
180.000	.2020	.1240	-.1180
225.000	-.0980	-.0670	-.1170
270.000	-.1120	-.1100	-.1130

MACH (2) = 2.999 BETAT (5) = 2.230

X/LNP	.250	.500	.750
PHI			
.000	-.1040	-.1050	
90.000	-.1110	-.1070	-.1080
135.000	-.0920	-.0480	-.1140
180.000	.1890	.1350	-.1020
225.000	-.0290	-.0360	-.1130
270.000	-.1080	-.1100	-.1090

MACH (2) = 2.999 BETAT (6) = 4.400

X/LNP	.250	.500	.750
PHI			
.000	-.1040	-.1060	
90.000	-.1110	-.1090	-.1070
135.000	-.0930	-.0790	-.1150
180.000	.1410	.1520	-.1020
225.000	-.0330	-.0360	- 1020
270.000	-.1090	-.1070	-. 050

MACH (2) = 2.999 BETAT (7) = 6.580

X/LNP	.250	.500	.750
PHI			
.000	-.1060	-.1080	
90.000	-.1150	-.1120	-.1100
135.000	-.1090	-.0980	-.1170
180.000	.1200	.1660	-.1160
225.000	-.0330	-.0150	-.1150

AMES 87-707 IA9 02A + 53 + T9 UPPER MPS NOZZLE (RBND02)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (7) = 6.580

X/LNP	.250	.500	.750
PHI			
270.000	-.1060	-.1090	-.1090

MACH (2) = 2.999 BETAT (8) = 8.750

X/LNP	.250	.500	.750
PHI			
.000	-.1040	-.1100	
90.000	-.1120	-.1140	-.1090
135.000	-.1140	-.1170	-.1170
180.000	.0800	.1770	-.1230
225.000	-.1020	-.1010	-.1120
270.000	-.1120	-.1110	-.1070

MACH (3) = 3.502 BETAT (1) = -8.710

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0950	
90.000	-.0980	-.1020	-.0950
135.000	.0000	.0040	-.0970
180.000	.0560	.1250	-.0980
225.000	-.0890	-.0890	-.1010
270.000	-.0970	-.0980	-.0980

MACH (3) = 3.502 BETAT (2) = -6.520

X/LNP	.250	.500	.750
PHI			
.000	-.0820	-.0910	
90.000	-.0990	-.0980	-.0910
135.000	.0020	-.0690	-.0890
180.000	.0760	.1020	-.0910
225.000	-.0770	-.0840	-.1040
270.000	-.0910	-.0910	-.0910

MACH (3) = 3.502 BETAT (3) = -4.330

X/LNP	.250	.500	.750
PHI			
.000	-.0850	-.0950	
90.000	-.0980	-.0970	-.0970
135.000	.0180	-.0360	-.0920
180.000	.1030	.1260	-.0940
225.000	-.0710	-.0750	-.0980
270.000	-.0970	-.0970	-.0970

MACH (3) = 3.502 BETAT (4) = -2.140

X/LNP	.250	.500	.750
PHI			
.000	-.0810	-.0910	
90.000	-.0940	-.0950	-.0920
135.000	.0490	-.0460	-.0920
180.000	.1590	.1400	-.0870
225.000	-.0550	-.0140	-.0950

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBNDU2)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = -2.140

X/LNP	.250	.500	.750
PHI			
270.000	-.0910	-.0880	-.0900

MACH (3) = 3.502 BETAT (5) = 2.260

X/LNP	.250	.500	.750
PHI			
.000	-.0810	-.0900	
90.000	-.0920	-.0910	-.0940
135.000	-.0480	-.0020	-.0960
180.000	.1580	.1510	-.0850
225.000	-.0090	.0120	-.0890
270.000	-.0930	-.0920	-.0870

MACH (3) = 3.502 BETAT (6) = 4.480

X/LNP	.250	.500	.750
PHI			
.000	-.0830	-.0930	
90.000	-.0970	-.0960	-.0940
135.000	-.0590	-.0730	-.1010
180.000	.0940	.1370	-.0850
225.000	-.0190	-.0130	-.0920
270.000	-.0970	-.0940	-.0940

MACH (3) = 3.502 BETAT (7) = 6.690

X/LNP	.250	.500	.750
PHI			
.000	-.0810	-.0920	
90.000	-.0930	-.0950	-.0950
135.000	-.0820	-.0810	-.0990
180.000	.0740	.1500	-.0930
225.000	-.0210	.0140	-.0900
270.000	-.0980	-.0960	-.0940

MACH (3) = 3.502 BETAT (8) = 8.910

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0980	
90.000	-.0960	-.0970	-.1000
135.000	-.0900	-.1020	-.1030
180.000	.0730	.0550	-.1020
225.000	-.0200	.0330	-.0960
270.000	-.1040	-.0980	-.1010

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND03) (15 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	-6.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LNP	.250	.500	.750
PHI			
.000	-.1420	-.1470	
90.000	-.1320	-.1460	-.1420
135.000	-.0540	-.0920	-.1490
180.000	.0770	.0040	-.1520
225.000	-.1610	-.1620	-.1470
270.000	-.1490	-.1470	-.1460

MACH (1) = 2.498 BETAT (2) = -6.290

X/LNP	.250	.500	.750
PHI			
.000	-.1430	-.1470	
90.000	-.1480	-.1480	-.1430
135.000	-.1640	-.1270	-.1530
180.000	.0750	.0690	-.1470
225.000	-.1480	-.1500	-.1530
270.000	-.1480	-.1450	-.1430

MACH (1) = 2.498 BETAT (3) = -4.180

X/LNP	.250	.500	.750
PHI			
.000	-.1460	-.1460	
90.000	-.1510	-.1460	-.1410
135.000	-.0900	-.1450	-.1510
180.000	.1640	.0280	-.1440
225.000	-.1480	-.1360	-.1510
270.000	-.1500	-.1450	-.1460

MACH (1) = 2.498 BETAT (4) = -2.070

X/LNP	.250	.500	.750
PHI			
.000	-.1410	-.1410	
90.000	-.1460	-.1440	-.1390
135.000	-.1040	-.1480	-.1490
180.000	.1660	.0680	-.1400
225.000	-.1520	-.1280	-.1540
270.000	-.1430	-.1390	-.1430

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNP	.250	.500	.750
PHI			
.000	-.1430	-.1440	
90.000	-.1450	-.1460	-.1460
135.000	-.1690	-.1280	-.1530
180.000	.1150	.0090	-.1410
225.000	-.1190	-.1490	-.1

AMES 87-707 IA9 C2A + S3 + T9 UPPER MP3 NOZZLE (RBND03)

SECTION (1)MP3 NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNP	.250	.500	.750
PHI			
270.000	-.1480	-.1460	-.1420

MACH (1) = 2.498 BETAT (6) = 4.310

X/LNP	.250	.500	.750
PHI			
.000	-.1400	-.1430	
90.000	-.1460	-.1430	-.1440
135.000	-.1590	-.1260	-.1490
180.000	.1260	.0080	-.1390
225.000	-.1020	-.1370	-.1510
270.000	-.1450	-.1440	-.1420

MACH (1) = 2.498 BETAT (7) = 6.440

X/LNP	.250	.500	.750
PHI			
.000	-.1430	-.1440	
90.000	-.1490	-.1470	-.1450
135.000	-.1610	-.1450	-.1510
180.000	.1060	.0250	-.1530
225.000	-.0840	-.1150	-.1530
270.000	-.1490	-.1470	-.1420

MACH (1) = 2.498 BETAT (8) = 8.575

X/LNP	.250	.500	.750
PHI			
.000	-.1450	-.1480	
90.000	-.1520	-.1480	-.1480
135.000	-.1680	-.1620	-.1540
180.000	.1530	.1220	-.1640
225.000	-.0720	-.0850	-.1560
270.000	-.1540	-.1500	-.1490

MACH (2) = 2.999 BETAT (1) = -8.570

X/LNP	.250	.500	.750
PHI			
.000	-.1110	-.1150	
90.000	-.1170	-.1170	-.1120
135.000	-.0290	-.0250	-.1110
180.000	.0700	.0990	-.1200
225.000	-.1210	-.1190	-.1170
270.000	-.1150	-.1150	-.1130

MACH (2) = 2.999 BETAT (2) = -6.420

X/LNP	.250	.500	.750
PHI			
.000	-.1080	-.1110	
90.000	-.1120	-.1120	-.1090
135.000	-.0210	-.0380	-.1140
180.000	.0920	.0350	-.1120
225.000	-.1030	-.1090	-.1200

AMES 67-767 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND03)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.425

X/LNP	.250	.500	.750
PHI			
270.000	-.1140	-.1120	-.1130

MACH (2) = 2.999 BETAT (3) = -4.260

X/LNP	.250	.500	.750
PHI			
.000	-.1100	-.1150	
90.000	-.1170	-.1180	-.1140
135.000	-.0170	-.0690	-.1180
180.000	.1310	.0630	-.1130
225.000	-.0910	-.0870	-.1250
270.000	-.1190	-.1160	-.1150

MACH (2) = 2.999 BETAT (4) = -2.150

X/LNP	.250	.500	.750
PHI			
.000	-.1070	-.1110	
90.000	-.1160	-.1150	-.1140
135.000	-.0120	-.0750	-.1160
180.000	.1730	.1090	-.1140
225.000	-.1040	-.0710	-.1200
270.000	-.1130	-.1120	-.1130

MACH (2) = 2.999 BETAT (5) = 2.220

X/LNP	.250	.500	.750
PHI			
.000	-.1080	-.1150	
90.000	-.1150	-.1150	-.1130
135.000	-.0960	-.0560	-.1180
180.000	.1520	.0910	-.1120
225.000	-.0610	-.0540	-.1180
270.000	-.1130	-.1130	-.1130

MACH (2) = 2.999 BETAT (6) = 4.390

X/LNP	.250	.500	.750
PHI			
.000	-.1080	-.1150	
90.000	-.1160	-.1160	-.1120
135.000	-.0910	-.0730	-.1190
180.000	.1230	.1260	-.1080
225.000	-.0450	-.0540	-.1120
270.000	-.1120	-.1120	-.1090

MACH (2) = 2.999 BETAT (7) = 6.560

X/LNP	.250	.500	.750
PHI			
.000	-.1050	-.1110	
90.000	-.1110	-.1110	-.1110
135.000	-.1090	-.1060	-.1160
180.000	.0990	.1310	-.1130
225.000	-.0440	-.0230	-.1090

AMES 87-757 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBNDU3)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (7) = 5.560

X/LNP	.250	.500	.750
PHI			
270.000	-.1595	-.1150	-.1580

MACH (2) = 2.999 BETAT (8) = 8.730

X/LNP	.250	.500	.750
PHI			
.000	-.1080	-.1125	
90.000	-.1135	-.1120	-.1150
135.000	-.1220	-.1190	-.1160
180.000	.0680	.1670	-.1220
225.000	-.0380	-.0850	-.1160
270.000	-.1160	-.1150	-.1090

MACH (3) = 3.502 BETAT (1) = -8.730

X/LNP	.250	.500	.750
PHI			
.000	-.0880	-.0980	
90.000	-.1040	-.1060	-.1000
135.000	-.0140	.0110	-.0950
180.000	.0390	.0750	-.1010
225.000	-.0950	-.0960	-.1020
270.000	-.0980	-.1000	-.0980

MACH (3) = 3.502 BETAT (2) = -6.530

X/LNP	.250	.500	.750
PHI			
.000	-.0840	-.0930	
90.000	-.0980	-.1000	-.0940
135.000	-.0160	-.0420	-.0940
180.000	.0540	.0870	-.0910
225.000	-.0870	-.0890	-.0990
270.000	-.0960	-.0960	-.0920

MACH (3) = 3.502 BETAT (3) = -4.340

X/LNP	.250	.500	.750
PHI			
.000	-.0910	-.1000	
90.000	-.1010	-.1010	-.1000
135.000	.0010	-.0440	-.1000
180.000	.0820	.1130	-.0940
225.000	-.0750	-.0740	-.1020
270.000	-.0990	-.0990	-.0990

MACH (3) = 3.502 BETAT (4) = -2.140

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0960	
90.000	-.0970	-.0980	-.0970
135.000	-.0610	-.0590	-.0940
180.000	.1340	.1430	-.0900
225.000	-.0660	-.0360	-.1000

AMES 87-757 IA9 OEA + S3 + T9 UPPER MPS NOZZLE (RSND,3)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = -2.145

X/LNP	.25)	.50)	.75)
PHI			
270.000	-.0955	-.0930	-.0970

MACH (3) = 3.502 BETAT (5) = 2.280

X/LNP	.25)	.50)	.75)
PHI			
.000	-.0870	-.0920	
90.000	-.0955	-.0940	-.0950
135.000	-.0595	-.0230	-.0490
180.000	.1260	.1510	-.0690
225.000	-.0190	-.0110	-.0940
270.000	-.0940	-.0910	-.0940

MACH (3) = 3.502 BETAT (6) = 4.470

X/LNP	.25)	.50)	.75)
PHI			
.000	-.0850	-.0940	
90.000	-.0970	-.0970	-.0960
135.000	-.0660	-.0660	-.0420
180.000	.0750	.1220	-.0290
225.000	-.0330	-.0320	-.0940
270.000	-.0980	-.0970	-.0950

MACH (3) = 3.502 BETAT (7) = 5.980

X/LNP	.25)	.50)	.75)
PHI			
.000	-.0870	-.0940	
90.000	-.0970	-.0980	-.0960
135.000	-.0880	-.0890	-.0610
180.000	.0510	.1240	-.0470
225.000	-.0320	.0020	-.0910
270.000	-.1000	-.0950	-.0950

MACH (3) = 3.502 BETAT (8) = 8.990

X/LNP	.25)	.50)	.75)
PHI			
.000	-.0680	-.0970	
90.000	-.0950	-.0990	-.0970
135.000	-.0960	-.0630	-.0610
180.000	.0590	.0350	-.0130
225.000	-.0250	.0260	-.0990
270.000	-.1000	-.0970	-.0980

AMES 67-707 IA9 02A + 53 + 79 UPPER MPS NOZZLE (RBND04) (15 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.539 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 35.843 INCHES ZMRP = .000 INCHES
SCALE = .039 SCALE

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLP = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.43

X/LNP	.25	.50	.75
PHI			
.000	-.157	-.155	
90.000	-.154	-.151	-.149
135.000	-.179	-.135	-.154
180.000	.025	-.001	-.163
225.000	-.158	-.164	-.154
270.000	-.154	-.151	-.151

MACH (1) = 2.498 BETAT (2) = -6.31

X/LNP	.25	.50	.75
PHI			
.000	-.149	-.155	
90.000	-.154	-.150	-.145
135.000	-.188	-.134	-.155
180.000	.144	-.013	-.154
225.000	-.155	-.154	-.155
270.000	-.154	-.152	-.151

MACH (1) = 2.498 BETAT (3) = -4.19

X/LNP	.25	.50	.75
PHI			
.000	-.144	-.147	
90.000	-.150	-.142	-.141
135.000	-.199	-.149	-.152
180.000	.127	.011	-.148
225.000	-.151	-.140	-.151
270.000	-.151	-.148	-.147

MACH (1) = 2.498 BETAT (4) = -2.07

X/LNP	.25	.50	.75
PHI			
.000	-.143	-.145	
90.000	-.147	-.146	-.141
135.000	-.113	-.153	-.143
180.000	.125	.036	-.149
225.000	-.150	-.136	-.155
270.000	-.145	-.146	-.145

MACH (1) = 2.498 BETAT (5) = 2.18

X/LNP	.25	.50	.75
PHI			
.000	-.147	-.151	
90.000	-.151	-.150	-.151
135.000	-.175	-.138	-.158
180.000	.172	-.011	-.148
225.000	-.133	-.151	-.158

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND04)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNP	.250	.500	.750
PHI			
270.000	-.1520	-.1530	-.1460

MACH (1) = 2.498 BETAT (6) = 4.300

X/LNP	.250	.500	.750
PHI			
.000	-.1440	-.1480	
90.000	-.1530	-.1500	-.1480
135.000	-.1660	-.1330	-.1510
180.000	.0860	-.0230	-.1500
225.000	-.1120	-.1410	-.1580
270.000	-.1490	-.1500	-.1470

MACH (1) = 2.498 BETAT (7) = 6.430

X/LNP	.250	.500	.750
PHI			
.000	-.1390	-.1420	
90.000	-.1460	-.1430	-.1420
135.000	-.1540	-.1390	-.1460
180.000	.0750	.0050	-.1490
225.000	-.0970	-.1220	-.1510
270.000	-.1440	-.1430	-.1410

MACH (1) = 2.498 BETAT (8) = 8.590

X/LNP	.250	.500	.750
PHI			
.000	-.1390	-.1410	
90.000	-.1450	-.1410	-.1420
135.000	-.1600	-.1550	-.1450
180.000	.1190	.0860	-.1530
225.000	-.0820	-.1150	-.1500
270.000	-.1430	-.1420	-.1380

MACH (2) = 2.999 BETAT (1) = -8.580

X/LNP	.250	.500	.750
PHI			
.000	-.1090	-.1130	
90.000	-.1160	-.1150	-.1120
135.000	-.0440	-.0380	-.1130
180.000	.0530	.0840	-.1180
225.000	-.1190	-.1150	-.1150
270.000	-.1140	-.1130	-.1130

MACH (2) = 2.999 BETAT (2) = -6.420

X/LNP	.250	.500	.750
PHI			
.000	-.1190	-.1130	
90.000	-.1140	-.1140	-.1090
135.000	-.0410	-.0500	-.1160
180.000	.0580	.0210	-.1150
225.000	-.1070	-.1140	-.1190

AMES 87-757 IA9 02A + 83 + 79 UPPER MPS NOZZLE (RBNOO4)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -8.42D

X/LNP	.25D	.50D	.75D
PHI			
270.000	-.113D	-.116D	-.114D

MACH (2) = 2.999 BETAT (3) = -4.28D

X/LNP	.25D	.50D	.75D
PHI			
.000	-.113D	-.115D	
90.000	-.119D	-.118D	-.115D
135.000	-.036D	-.082D	-.120D
180.000	.122D	.046D	-.117D
225.000	-.096D	-.083D	-.123D
270.000	-.121D	-.117D	-.116D

MACH (2) = 2.999 BETAT (4) = -2.11D

X/LNP	.25D	.50D	.75D
PHI			
.000	-.112D	-.114D	
90.000	-.119D	-.118D	-.115D
135.000	-.032D	-.092D	-.119D
180.000	.135D	.074D	-.115D
225.000	-.114D	-.085D	-.122D
270.000	-.118D	-.117D	-.117D

MACH (2) = 2.999 BETAT (5) = 2.21D

X/LNP	.25D	.50D	.75D
PHI			
.000	-.111D	-.115D	
90.000	-.117D	-.113D	-.117D
135.000	-.107D	-.073D	-.122D
180.000	.116D	.054D	-.116D
225.000	-.056D	-.075D	-.121D
270.000	-.117D	-.117D	-.115D

MACH (2) = 2.999 BETAT (6) = 4.38D

X/LNP	.25D	.50D	.75D
PHI			
.000	-.114D	-.117D	
90.000	-.121D	-.120D	-.118D
135.000	-.099D	-.075D	-.121D
180.000	.116D	.079D	-.117D
225.000	-.063D	-.059D	-.120D
270.000	-.116D	-.119D	-.115D

MACH (2) = 2.999 BETAT (7) = 6.55D

X/LNP	.25D	.50D	.75D
PHI			
.000	-.111D	-.113D	
90.000	-.116D	-.115D	-.115D
135.000	-.115D	-.112D	-.119D
180.000	.098D	.078D	-.121D
225.000	-.063D	-.053D	-.117D

AMES 97-757 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (FBND04)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (7) = 6.555

X/LNP	.250	.500	.750
PHI			
270.000	-.1155	-.1140	-.1140

MACH (2) = 2.999 BETAT (8) = 8.715

X/LNP	.250	.500	.750
PHI			
.000	-.1115	-.1140	
90.000	-.1140	-.2130	-.1140
135.000	-.1275	-.1190	-.1155
180.000	.0470	.1460	-.1230
225.000	-.0550	-.0350	-.1180
270.000	-.1170	-.1140	-.1120

MACH (3) = 3.502 BETAT (1) = -8.745

X/LNP	.250	.500	.750
PHI			
.000	-.0850	-.0980	
90.000	-.0970	-.1140	-.1010
135.000	-.0210	-.0490	-.0960
180.000	.0180	.0720	-.1140
225.000	-.0990	-.0950	-.1140
270.000	-.0990	-.0990	-.0980

MACH (3) = 3.502 BETAT (2) = -6.540

X/LNP	.250	.500	.750
PHI			
.000	-.0880	-.0980	
90.000	-.0990	-.1030	-.0990
135.000	-.0320	-.0410	-.0970
180.000	.0410	.0650	-.0950
225.000	-.0940	-.0820	-.1140
270.000	-.0990	-.0970	-.0960

MACH (3) = 3.502 BETAT (3) = -4.340

X/LNP	.250	.500	.750
PHI			
.000	-.0900	-.1060	
90.000	-.1030	-.1120	-.1140
135.000	-.0180	-.0280	-.1020
180.000	.0670	.0820	-.0990
225.000	-.0720	-.0750	-.1070
270.000	-.1030	-.1020	-.1020

MACH (3) = 3.502 BETAT (4) = -2.150

X/LNP	.250	.500	.750
PHI			
.000	-.0840	-.0960	
90.000	-.0950	-.0950	-.0910
135.000	.0020	-.0600	-.0940
180.000	.1230	.1130	-.0890
225.000	-.0650	-.0410	-.0970

AMES 87-757 IA9 OEA + S3 + T9 UPPER MPS NOZZLE (RBNDU4)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = -2.15)

//LNP	.25)	.5)	.75)
PHI			
27).00)	-.0999)	-.0895)	-.0933)

MACH (3) = 3.502 BETAT (5) = 2.26)

//LNP	.25)	.5)	.75)
PHI			
.00)	-.0875)	-.0995)	
9).00)	-.0968)	-.0969)	-.0965)
135).00)	-.0589)	-.0927)	-.1015)
18).00)	.0999)	.1259)	-.0959)
225).00)	-.0921)	-.0398)	-.0968)
27).00)	-.0955)	-.0940)	-.0940)

MACH (3) = 3.502 BETAT (6) = 4.48)

//LNP	.25)	.5)	.75)
PHI			
.00)	-.0966)	-.0995)	
9).00)	-.0966)	-.0999)	-.0979)
135).00)	-.0569)	-.0954)	-.1020)
18).00)	.0959)	.1122)	-.0993)
225).00)	-.0932)	-.0917)	-.0999)
27).00)	-.0959)	-.0988)	-.0995)

MACH (3) = 3.502 BETAT (7) = 6.50)

//LNP	.25)	.5)	.75)
PHI			
.00)	-.0977)	-.0968)	
9).00)	-.0939)	-.0988)	-.0968)
135).00)	-.0924)	-.0995)	-.1020)
18).00)	.0935)	.1017)	-.0939)
225).00)	-.0937)	.0822)	-.0995)
27).00)	-.0999)	-.0999)	-.0995)

MACH (3) = 3.502 BETAT (8) = 8.87)

//LNP	.25)	.5)	.75)
PHI			
.00)	-.0859)	-.0999)	
9).00)	-.0975)	-.1000)	-.1000)
135).00)	-.1059)	-.1060)	-.1020)
18).00)	.0959)	.0927)	-.1060)
225).00)	-.0959)	-.0959)	-.1020)
27).00)	-.1020)	-.1020)	-.1020)

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND05) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHAT = -2.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

X/LNP	.250	.500	.750
PHI			
.000	-.1460	-.1480	
90.000	-.1510	-.1500	-.1480
135.000	-.0890	-.1140	-.1530
180.000	-.0620	-.1010	-.1610
225.000	-.1550	-.1580	-.1510
270.000	-.1510	-.1500	-.1500

MACH (1) = 2.498 BETAT (2) = -6.310

X/LNP	.250	.500	.750
PHI			
.000	-.1470	-.1490	
90.000	-.1510	-.1490	-.1490
135.000	-.1030	-.1260	-.1540
180.000	.0440	-.0340	-.1530
225.000	-.1440	-.1510	-.1500
270.000	-.1510	-.1480	-.1490

MACH (1) = 2.498 BETAT (3) = -4.190

X/LNP	.250	.500	.750
PHI			
.000	-.1470	-.1480	
90.000	-.1480	-.1480	-.1420
135.000	-.1050	-.1420	-.1510
180.000	.0820	-.0190	-.1480
225.000	-.1550	-.1440	-.1490
270.000	-.1500	-.1480	-.1470

MACH (1) = 2.498 BETAT (4) = -2.070

X/LNP	.250	.500	.750
PHI			
.000	-.1460	-.1460	
90.000	-.1480	-.1460	-.1430
135.000	-.1280	-.1500	-.1480
180.000	.0910	.0110	-.1430
225.000	-.1600	-.1400	-.1520
270.000	-.1480	-.1460	-.1460

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNP	.250	.500	.750
PHI			
.000	-.1440	-.1470	
90.000	-.1490	-.1470	-.1470
135.000	-.1740	-.1380	-.1520
180.000	.0420	-.0160	-.1500
225.000	-.1370	-.1470	-.——

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND05)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNP	.250	.500	.750
PHI			
270.000	-.1490	-.1470	-.1420

MACH (1) = 2.498 BETAT (6) = 4.300

X/LNP	.250	.500	.750
PHI			
.000	-.1420	-.1460	
90.000	-.1510	-.1490	-.1460
135.000	-.1620	-.1380	-.1490
180.000	.0620	-.0200	-.1490
225.000	-.1210	-.1450	-.1530
270.000	-.1500	-.1490	-.1440

MACH (1) = 2.498 BETAT (7) = 6.420

X/LNP	.250	.500	.750
PHI			
.000	-.1430	-.1450	
90.000	-.1500	-.1480	-.1450
135.000	-.1540	-.1440	-.1480
180.000	.0420	-.0160	-.1520
225.000	-.1120	-.1360	-.1550
270.000	-.1470	-.1450	-.1450

MACH (1) = 2.498 BETAT (8) = 8.540

X/LNP	.250	.500	.750
PHI			
.000	-.1400	-.1430	
90.000	-.1460	-.1440	-.1440
135.000	-.1390	-.1550	-.1460
180.000	.0750	.0520	-.1560
225.000	-.1010	-.1300	-.1530
270.000	-.1440	-.1430	-.1430

MACH (2) = 2.999 BETAT (1) = -8.590

X/LNP	.250	.500	.750
PHI			
.000	-.1190	-.1120	
90.000	-.1150	-.1140	-.1130
135.000	-.0510	-.0510	-.1150
180.000	.0320	.0550	-.1180
225.000	-.1170	-.1160	-.1150
270.000	-.1140	-.1120	-.1150

MACH (2) = 2.999 BETAT (2) = -6.440

X/LNP	.250	.500	.750
PHI			
.000	-.1110	-.1140	
90.000	-.1150	-.1150	-.1120
135.000	-.0570	-.0680	-.1140
180.000	.0360	-.0280	-.1150
225.000	-.1090	-.1170	-.1140

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND05)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.445

X/LNP	.250	.500	.750
PHI			
270.000	-.1150	-.1150	-.1110

MACH (2) = 2.999 BETAT (3) = -4.270

X/LNP	.250	.500	.750
PHI			
.000	-.1090	-.1140	
90.000	-.1150	-.1130	-.1120
135.000	-.0530	-.0850	-.1160
180.000	.1120	.0210	-.1120
225.000	-.1060	-.0980	-.1150
270.000	-.1160	-.1150	-.1150

MACH (2) = 2.999 BETAT (4) = -2.110

X/LNP	.250	.500	.750
PHI			
.000	-.1110	-.1170	
90.000	-.1180	-.1180	-.1150
135.000	-.0570	-.1070	-.1190
180.000	.1050	.0400	-.1120
225.000	-.1190	-.0950	-.1230
270.000	-.1150	-.1150	-.1180

MACH (2) = 2.999 BETAT (5) = 2.220

X/LNP	.250	.500	.750
PHI			
.000	-.1090	-.1130	
90.000	-.1140	-.1130	-.1150
135.000	-.1120	-.0840	-.1180
180.000	.0810	.0310	-.1120
225.000	-.0760	-.0970	-.1190
270.000	-.1150	-.1130	-.1130

MACH (2) = 2.999 BETAT (6) = 4.370

X/LNP	.250	.500	.750
PHI			
.000	-.1050	-.1110	
90.000	-.1130	-.1110	-.1090
135.000	-.1000	-.0830	-.1130
180.000	.0980	.0230	-.1130
225.000	-.0680	-.0760	-.1150
270.000	-.1020	-.1090	-.1090

MACH (2) = 2.999 BETAT (7) = 5.530

X/LNP	.250	.500	.750
PHI			
.000	-.1050	-.1070	
90.000	-.1110	-.1080	-.1080
135.000	-.1070	-.1090	-.1110
180.000	.0730	.0400	-.1130
225.000	-.0660	-.0730	-.1150

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND05)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (7) = 6.530

X/LNP	.250	.500	.750
PHI			
270.000	-.1090	-.1080	-.1080

MACH (2) = 2.999 BETAT (8) = 8.700

X/LNP	.250	.500	.750
PHI			
.000	-.1060	-.1080	
90.000	-.1100	-.1100	-.1100
135.000	-.1190	-.1150	-.1110
180.000	.0440	.1370	-.1170
225.000	-.0620	-.0440	-.1170
270.000	-.1110	-.1150	-.1170

MACH (3) = 3.502 BETAT (1) = -8.750

X/LNP	.250	.500	.750
PHI			
.000	-.0860	-.0970	
90.000	-.0960	-.0980	-.0960
135.000	-.0290	-.0270	-.0980
180.000	.0010	.0520	-.0970
225.000	-.1000	-.0940	-.0980
270.000	-.0960	-.0960	-.0940

MACH (3) = 3.502 BETAT (2) = -6.540

X/LNP	.250	.500	.750
PHI			
.000	-.0880	-.0990	
90.000	-.0970	-.1010	-.0960
135.000	-.0410	-.0210	-.0970
180.000	.0280	.0250	-.0970
225.000	-.0920	-.0950	-.0990
270.000	-.0970	-.0970	-.0970

MACH (3) = 3.502 BETAT (3) = -4.350

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0980	
90.000	-.0990	-.1000	-.0980
135.000	-.0380	-.0250	-.1010
180.000	.0750	.0410	-.0980
225.000	-.0750	-.0780	-.1030
270.000	-.0970	-.0990	-.0990

MACH (3) = 3.502 BETAT (4) = -2.140

X/LNP	.250	.500	.750
PHI			
.000	-.0880	-.0970	
90.000	-.0970	-.1000	-.0980
135.000	-.0110	-.0680	-.0990
180.000	.1010	.0720	-.0950
225.000	-.0750	-.0540	-.1000

AMES 87-707 IA9 C8A + S3 + T9 UPPER MPS NOZZLE (RBNDU5)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = -2.140

X/LNP	.250	.500	.750
PHI			
270.000	-.0950	-.0930	-.0970

MACH (3) = 3.502 BETAT (5) = 2.260

X/LNP	.250	.500	.750
PHI			
.000	-.0840	-.0960	
90.000	-.0980	-.0960	-.0980
135.000	-.0620	-.0400	-.1010
180.000	.0700	.0920	-.0840
225.000	-.0380	-.0640	-.1020
270.000	-.0970	-.0970	-.0990

MACH (3) = 3.502 BETAT (6) = 4.460

X/LNP	.250	.500	.750
PHI			
.000	-.0860	-.0960	
90.000	-.0690	-.0980	-.0980
135.000	-.0710	-.0720	-.2140
180.000	.0600	.1200	-.0970
225.000	-.0490	-.0660	-.1020
270.000	-.0990	-.0990	-.1000

MACH (3) = 3.502 BETAT (7) = 6.660

X/LNP	.250	.500	.750
PHI			
.000	-.0890	-.0980	
90.000	-.0990	-.1000	-.0960
135.000	-.0930	-.0970	-.1010
180.000	.0220	.0880	-.0980
225.000	-.0510	-.0830	-.0960
270.000	-.0980	-.0960	-.0960

MACH (3) = 3.502 BETAT (8) = 8.860

X/LNP	.250	.500	.750
PHI			
.000	-.0880	-.1010	
90.000	-.0970	-.1010	-.1000
135.000	-.1040	-.1030	-.1030
180.000	.0020	.0440	-.1050
225.000	-.0510	-.0250	-.1020
270.000	-.1010	-.1030	-.1000

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND06) (15 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 20.5300 INCHES
LREF = 39.8495 INCHES YMRP = .0000 INCHES
BREF = 39.8495 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

X/LNP	.250	.500	.750
PHI			
.000	-.1520	-.1530	
90.000	-.1530	-.1550	-.1540
135.000	-.1030	-.1420	-.1590
180.000	-.0300	.0230	-.1640
225.000	-.1650	-.1580	-.1550
270.000	-.1550	-.1540	-.1540

MACH (1) = 2.498 BETAT (2) = -6.315

X/LNP	.250	.500	.750
PHI			
.000	-.1500	-.1520	
90.000	-.1540	-.1520	-.1510
135.000	-.1170	-.1390	-.1570
180.000	.0110	-.0540	-.1560
225.000	-.1560	-.1590	-.1540
270.000	-.1540	-.1520	-.1520

MACH (1) = 2.498 BETAT (3) = -4.195

X/LNP	.250	.500	.750
PHI			
.000	-.1470	-.1510	
90.000	-.1530	-.1510	-.1500
135.000	-.1230	-.1410	-.1530
180.000	.0350	-.0300	-.1560
225.000	-.1600	-.1560	-.1540
270.000	-.1540	-.1530	-.1550

MACH (1) = 2.498 BETAT (4) = -2.075

X/LNP	.250	.500	.750
PHI			
.000	-.1460	-.1480	
90.000	-.1500	-.1490	-.1450
135.000	-.1390	-.1520	-.1500
180.000	.0540	-.0170	-.1490
225.000	-.1620	-.1460	-.1540
270.000	-.1500	-.1470	-.1480

MACH (1) = 2.498 BETAT (5) = 2.170

X/LNP	.250	.500	.750
PHI			
.000	-.1460	-.1480	
90.000	-.1480	-.1500	-.1500
135.000	-.1700	-.1380	-.1500
180.000	.0150	-.0610	-.1490
225.000	-.1430	-.1530	-.1550

AMES 67-7x7 BA9 OEA + S3 + T9 UPPER NPS NOZZLE (REDUCED)

SECTION 1 NPS NOZZLE DEPENDENT VARIABLE CP

MACH 1 = 2.436 BETA 1 = 2.1%

PHI	.25	.5	.75
27.5	-.155	-.148	-.147

MACH 1 = 2.458 BETA 1 = 4.2%

PHI	.25	.5	.75
.0	-.147	-.143	
9.0	-.154	-.153	-.151
135.0	-.152	-.149	-.154
180.0	-.132	-.122	-.155
225.0	-.131	-.147	-.157
27.0	-.152	-.151	-.149

MACH 1 = 2.498 BETA 1 = 5.4%

PHI	.25	.5	.75
.0	-.150	-.151	
9.0	-.154	-.151	-.151
135.0	-.157	-.154	-.153
180.0	-.127	-.140	-.157
225.0	-.125	-.151	-.159
27.0	-.151	-.150	-.151

MACH 1 = 2.498 BETA 1 = 3.5%

PHI	.25	.5	.75
.0	-.149	-.149	
9.0	-.152	-.152	-.151
135.0	-.152	-.152	-.153
180.0	-.133	-.150	-.152
225.0	-.134	-.137	-.155
27.0	-.151	-.154	-.149

MACH 2 = 2.999 BETA 2 = -3.5%

PHI	.25	.5	.75
.0	-.111	-.114	
9.0	-.113	-.115	-.115
135.0	-.165	-.171	-.117
180.0	-.111	-.113	-.117
225.0	-.114	-.116	-.114
27.0	-.116	-.115	-.115

MACH 2 = 2.999 BETA 2 = -5.4%

PHI	.25	.5	.75
.0	-.113	-.117	
9.0	-.115	-.115	-.115
135.0	-.174	-.191	-.114
180.0	-.114	-.147	-.116
225.0	-.111	-.115	-.117

AMES 67-717 IAS 02A + S3 + T9 UPPER MPS NOZZLE (FBXX46)

SECTION 1 :MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2. = -6.43)

THETA	.25)	.5))	.75)
27..))	-.1185	-.1166	-.1165

MACH (2) = 2.999 BETAT (3. = -4.27)

THETA	.25)	.5))	.75)
.))	-.1156	-.1135	
9..))	-.1146	-.1136	-.1125
135.))	-.1677	-.1677	-.1177
18..))	.1288	-.1121	-.1159
225.))	-.1155	-.1288	-.1155
27..))	-.1155	-.1136	-.1135

MACH (2) = 2.999 BETAT (4) = -2.11)

THETA	.25)	.5))	.75)
.))	-.1111	-.1159	
9..))	-.1175	-.1177	-.1159
135.))	-.1222	-.1211	-.1159
18..))	.1775	.1)16	-.1111
225.))	-.1155	-.1999	-.1225
27..))	-.1155	-.1135	-.1156

MACH (2) = 2.999 BETAT (5) = 2.21)

THETA	.25)	.5))	.75)
.))	-.1111	-.1139	
9..))	-.1146	-.1159	-.1159
135.))	-.1177	-.1166	-.1159
18..))	.1546	-.1122	-.1166
225.))	-.1999	-.1163	-.1159
27..))	-.1156	-.1156	-.1155

MACH (2) = 2.999 BETAT (6) = 4.37)

THETA	.25)	.5))	.75)
.))	-.1146	-.1139	
9..))	-.1139	-.1139	-.1139
135.))	-.1133	-.1122	-.1139
18..))	.1665	-.1117	-.1158
225.))	-.1221	-.1999	-.1211
27..))	-.1156	-.1156	-.1139

MACH (2) = 2.999 BETAT (7) = 6.53)

THETA	.25)	.5))	.75)
.))	-.1177	-.1111	
9..))	-.1159	-.1111	-.1111
135.))	-.1169	-.1133	-.1111
18..))	.1431	-.1139	-.1159
225.))	-.1751	-.1522	-.1214

AMES 87-707 IA9 C2A + S3 + T9 UPPER NPS NOZZLE (RBND06)

SECTION (1)NPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (7) = 8.535

X/LNP	.250	.500	.750
PHI			
270.000	-.1115	-.1110	-.1110

MACH (2) = 2.999 BETAT (8) = 8.695

X/LNP	.250	.500	.750
PHI			
.000	-.1595	-.1135	
90.000	-.1125	-.1125	-.1125
135.000	-.1215	-.1165	-.1145
180.000	.0395	.0985	-.1195
225.000	-.0725	-.1685	-.1175
270.000	-.1135	-.1125	-.1135

MACH (3) = 3.502 BETAT (1) = -8.755

X/LNP	.250	.500	.750
PHI			
.000	-.1855	-.1970	
90.000	-.1995	-.1980	-.1970
135.000	-.1465	-.1295	-.1995
180.000	-.0135	.1245	-.1515
225.000	-.1515	-.1925	-.1985
270.000	-.1995	-.1995	-.1995

MACH (3) = 3.502 BETAT (2) = -6.555

X/LNP	.250	.500	.750
PHI			
.000	-.1875	-.1970	
90.000	-.1980	-.1970	-.1995
135.000	-.0515	-.1465	-.1980
180.000	.0115	-.0135	-.1980
225.000	-.1970	-.1970	-.1995
270.000	-.1995	-.1995	-.1995

MACH (3) = 3.502 BETAT (3) = -4.340

X/LNP	.250	.500	.750
PHI			
.000	-.1995	-.1535	
90.000	-.1995	-.1525	-.1515
135.000	-.0565	-.0385	-.1535
180.000	.0675	.0195	-.1995
225.000	-.0915	-.1845	-.1955
270.000	-.1535	-.1515	-.1525

MACH (3) = 3.502 BETAT (4) = -2.150

X/LNP	.250	.500	.750
PHI			
.000	-.1875	-.1970	
90.000	-.1995	-.1970	-.1985
135.000	-.1465	-.1745	-.1995
180.000	.0725	.0525	-.1960
225.000	-.1855	-.1665	-.1995

AMES 27-INCH [illegible] + 33 + 73 DEGREE MPS NOZZLE (SHADOW)

SECTION (1)MPS NOZZLE DESIGNATION VARIABLE 33

MACH [illegible] = 3.5/2 BETA (5) = -2.25)	//_3F	.25)	.5)	.75)
	[illegible]			
	27 .1)	-.[illegible]	-.[illegible]	-.[illegible]
MACH (3) = 3.5/2 BETA (5) = 2.25)	//_3F	.25)	.5)	.75)
	[illegible]			
	.1)	-.[illegible]	-.[illegible]	
	3 .1)	-.[illegible]	-.[illegible]	-.[illegible]
	135. 1)	-.[illegible]	-.[illegible]	-.[illegible]
	2[illegible] .1)	.[illegible]	.[illegible]	-.[illegible]
	225. 1)	-.[illegible]	-.[illegible]	-.[illegible]
	27 .1)	-.[illegible]	-.[illegible]	-.[illegible]
MACH (3) = 3.5/2 BETA (6) = 4.45)	//_3F	.25)	.5)	.75)
	[illegible]			
	.1)	-.[illegible]	-.[illegible]	
	3 .1)	-.[illegible]	-.[illegible]	-.[illegible]
	135. 1)	-.[illegible]	-.[illegible]	-.[illegible]
	2[illegible] .1)	.[illegible]	.[illegible]	-.[illegible]
	225. 1)	-.[illegible]	-.[illegible]	-.[illegible]
	27 .1)	-.[illegible]	-.[illegible]	-.[illegible]
MACH (3) = 3.5/2 BETA (7) = 5.65)	//_3F	.25)	.5)	.75)
	[illegible]			
	.1)	-.[illegible]	-.[illegible]	
	3 .1)	-.[illegible]	-.[illegible]	-.[illegible]
	135. 1)	-.[illegible]	-.[illegible]	-.[illegible]
	2[illegible] .1)	.[illegible]	.[illegible]	-.[illegible]
	225. 1)	-.[illegible]	-.[illegible]	-.[illegible]
	27 .1)	-.[illegible]	-.[illegible]	-.[illegible]
MACH (3) = 3.5/2 BETA (8) = 6.85)	//_3F	.25)	.5)	.75)
	[illegible]			
	.1)	-.[illegible]	-.[illegible]	
	3 .1)	-.[illegible]	-.[illegible]	-.[illegible]
	135. 1)	-.[illegible]	-.[illegible]	-.[illegible]
	2[illegible] .1)	-.[illegible]	.[illegible]	-.[illegible]
	225. 1)	-.[illegible]	-.[illegible]	-.[illegible]
	27 .1)	-.[illegible]	-.[illegible]	-.[illegible]

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (FBNC507) (15 MAY 73)

REFERENCE DATA

SREF = 2.421) SQ.FT. XMRP = 28.532) INCHES
LREF = 39.849) INCHES YMRP = .000) INCHES
BREF = 39.849) INCHES ZMRP = .000) INCHES
SCALE = .030) SCALE

PARAMETRIC DATA

ALPHAT = 2.000) OFBINC = .500)
FJDES = .000) ELEVON = .000)
FJDFLT = .000)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.43)

//LNP	.25)	.50)	.75)
.000)	-.154)	-.156)	
90.000)	-.156)	-.159)	-.159)
135.000)	-.129)	-.151)	-.162)
180.000)	-.155)	-.161)	-.166)
225.000)	-.170)	-.162)	-.157)
270.000)	-.156)	-.156)	-.157)

MACH (1) = 2.498 BETAT (2) = -6.33)

//LNP	.25)	.50)	.75)
.000)	-.153)	-.154)	
90.000)	-.155)	-.158)	-.158)
135.000)	-.125)	-.145)	-.160)
180.000)	-.159)	-.162)	-.162)
225.000)	-.167)	-.163)	-.159)
270.000)	-.159)	-.157)	-.156)

MACH (1) = 2.498 BETAT (3) = -4.19)

//LNP	.25)	.50)	.75)
.000)	-.153)	-.152)	
90.000)	-.156)	-.156)	-.153)
135.000)	-.126)	-.147)	-.157)
180.000)	-.160)	-.164)	-.158)
225.000)	-.164)	-.162)	-.156)
270.000)	-.156)	-.155)	-.154)

MACH (1) = 2.498 BETAT (4) = -2.08)

//LNP	.25)	.50)	.75)
.000)	-.150)	-.153)	
90.000)	-.153)	-.151)	-.151)
135.000)	-.140)	-.142)	-.155)
180.000)	-.160)	-.159)	-.154)
225.000)	-.163)	-.159)	-.155)
270.000)	-.153)	-.151)	-.153)

MACH (1) = 2.498 BETAT (5) = 2.17)

//LNP	.25)	.50)	.75)
.000)	-.144)	-.147)	
90.000)	-.147)	-.149)	-.147)
135.000)	-.137)	-.139)	-.151)
180.000)	-.157)	-.154)	-.151)
225.000)	-.149)	-.149)	-.150

AMES 87-707 IA9 02A + S3 + T9 UPPER MFS NOZZLE (RBND07)

SECTION (1)MFS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 2.17

X/LNP	.25	.50	.75
PHI			
270.000	-.1560	-.1470	-.1480

MACH (1) = 2.498 BETAT (6) = 4.29

X/LNP	.25	.50	.75
PHI			
.000	-.1560	-.1510	
90.000	-.1530	-.1530	-.1510
135.000	-.1620	-.1540	-.1520
180.000	.0040	-.0670	-.1560
225.000	-.1280	-.1510	-.1570
270.000	-.1510	-.1510	-.1500

MACH (1) = 2.498 BETAT (7) = 6.41

X/LNP	.25	.50	.75
PHI			
.000	-.1510	-.1560	
90.000	-.1560	-.1540	-.1540
135.000	-.1670	-.1580	-.1540
180.000	.0130	-.0580	-.1590
225.000	-.1290	-.1530	-.1620
270.000	-.1540	-.1570	-.1540

MACH (1) = 2.498 BETAT (8) = 8.54

X/LNP	.25	.50	.75
PHI			
.000	-.1540	-.1560	
90.000	-.1580	-.1570	-.1570
135.000	-.1710	-.1640	-.1590
180.000	-.0050	.0280	-.1660
225.000	-.1310	-.1470	-.1650
270.000	-.1570	-.1590	-.1560

MACH (2) = 2.999 BETAT (1) = -8.59

X/LNP	.25	.50	.75
PHI			
.000	-.1140	-.1170	
90.000	-.1160	-.1180	-.1180
135.000	-.0880	-.0790	-.1190
180.000	-.0130	.0000	-.1220
225.000	-.1220	-.1170	-.1190
270.000	-.1190	-.1180	-.1180

MACH (2) = 2.999 BETAT (2) = -6.42

X/LNP	.25	.50	.75
PHI			
.000	-.0750	-.1170	
90.000	-.0980	-.1210	-.1170
135.000	-.0970	-.1040	-.1180
180.000	-.0150	-.0440	-.1160
225.000	-.1170	-.1190	-.1180

AMES 87-757 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND07)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.42D

X/LNP	.25D	.50D	.75D
PHI			
270.00D	-.119D	-.118D	-.119D

MACH (2) = 2.999 BETAT (3) = -4.27D

X/LNP	.25D	.50D	.75D
PHI			
.00D	-.115D	-.121D	
90.00D	-.120D	-.121D	-.119D
135.00D	-.108D	-.102D	-.121D
180.00D	.046D	-.018D	-.116D
225.00D	-.128D	-.101D	-.124D
270.00D	-.121D	-.119D	-.119D

MACH (2) = 2.999 BETAT (4) = -2.11D

X/LNP	.25D	.50D	.75D
PHI			
.00D	-.112D	-.117D	
90.00D	-.118D	-.117D	-.116D
135.00D	-.105D	-.102D	-.124D
180.00D	.036D	-.006D	-.113D
225.00D	-.124D	-.109D	-.122D
270.00D	-.118D	-.117D	-.117D

MACH (2) = 2.999 BETAT (5) = 2.21D

X/LNP	.25D	.50D	.75D
PHI			
.00D	-.114D	-.116D	
90.00D	-.116D	-.114D	-.117D
135.00D	-.125D	-.099D	-.121D
180.00D	.017D	-.037D	-.112D
225.00D	-.109D	-.099D	-.118D
270.00D	-.116D	-.117D	-.116D

MACH (2) = 2.999 BETAT (6) = 4.37D

X/LNP	.25D	.50D	.75D
PHI			
.00D	-.114D	-.116D	
90.00D	-.120D	-.119D	-.117D
135.00D	-.118D	-.094D	-.124D
180.00D	.026D	-.028D	-.116D
225.00D	-.084D	-.103D	-.119D
270.00D	-.118D	-.117D	-.118D

MACH (2) = 2.999 BETAT (7) = 6.53D

X/LNP	.25D	.50D	.75D
PHI			
.00D	-.111D	-.114D	
90.00D	-.115D	-.114D	-.115D
135.00D	-.105D	-.096D	-.114D
180.00D	.012D	-.034D	-.117D
225.00D	-.094D	-.101D	-.119D

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND07)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (7) = 6.53

X/LNP	.25	.50	.75
PHI			
270.000	-.1160	-.1160	-.1160

MACH (2) = 2.999 BETAT (8) = 8.69

X/LNP	.25	.50	.75
PHI			
.000	-.1120	-.1160	
90.000	-.1160	-.1160	-.1160
135.000	-.1260	-.1240	-.1160
180.000	.0240	.0220	-.1220
225.000	-.0960	-.0970	-.1230
270.000	-.1170	-.1180	-.1160

MACH (3) = 3.502 BETAT (1) = -8.73

X/LNP	.25	.50	.75
PHI			
.000	-.0910	-.1040	
90.000	-.1030	-.1050	-.1020
135.000	-.0660	-.0640	-.1040
180.000	-.0150	-.0250	-.1040
225.000	-.1040	-.1060	-.1050
270.000	-.1020	-.1030	-.1030

MACH (3) = 3.502 BETAT (2) = -6.54

X/LNP	.25	.50	.75
PHI			
.000	-.0910	-.1020	
90.000	-.1060	-.1030	-.1020
135.000	-.0620	-.0710	-.1020
180.000	-.0170	-.0370	-.1020
225.000	-.0990	-.0990	-.1020
270.000	-.1030	-.1020	-.1020

MACH (3) = 3.502 BETAT (3) = -4.34

X/LNP	.25	.50	.75
PHI			
.000	-.0910	-.1040	
90.000	-.1040	-.1050	-.1040
135.000	-.0630	-.0690	-.1050
180.000	.0440	.0020	-.1020
225.000	-.0980	-.0770	-.1060
270.000	-.1050	-.1030	-.1040

MACH (3) = 3.502 BETAT (4) = -2.14

X/LNP	.25	.50	.75
PHI			
.000	-.0890	-.0990	
90.000	-.1010	-.1020	-.0990
135.000	-.0610	-.0810	-.1030
180.000	.0260	.0140	-.0990
225.000	-.0940	-.0870	-.1030

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND07)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = -2.14[illegible]

X/LNP	.250	.500	.750
PHI			
270.000	-.1010	-.1080	-.1080

MACH (3) = 3.502 BETAT (5) = 2.250

X/LNP	.250	.500	.750
PHI			
.000	-.0910	-.1020	
90.000	-.1010	-.1030	-.1060
135.000	-.0870	-.0710	-.1050
180.000	.0380	-.0230	-.0950
225.000	-.0660	-.0860	-.1050
270.000	-.1030	-.1010	-.1060

MACH (3) = 3.502 BETAT (6) = 4.480

X/LNP	.250	.500	.750
PHI			
.000	-.0940	-.1010	
90.000	-.1010	-.1010	-.1020
135.000	-.0810	-.0570	-.1030
180.000	.0420	.0050	-.0930
225.000	-.0640	-.0490	-.0970
270.000	-.0990	-.0980	-.1010

MACH (3) = 3.502 BETAT (7) = 6.660

X/LNP	.250	.500	.750
PHI			
.000	-.0940	-.1040	
90.000	-.1030	-.1030	-.1030
135.000	-.1010	-.1070	-.1050
180.000	-.0110	-.0060	-.1060
225.000	-.0730	-.0630	-.1050
270.000	-.1010	-.1010	-.1030

MACH (3) = 3.502 BETAT (8) = 8.850

X/LNP	.250	.500	.750
PHI			
.000	-.0910	-.1050	
90.000	-.1010	-.1030	-.1040
135.000	-.1080	-.1060	-.1030
180.000	-.0160	.0330	-.1050
225.000	-.0750	-.0520	-.1050
270.000	-.1050	-.1030	-.1030

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBNDU8) (11 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LNP	.250	.500	.750
PHI			
.000	-.159	-.162	
90.000	-.161	-.165	-.165
135.000	-.142	-.151	-.167
180.000	-.072	-.032	-.170
225.000	-.176	-.165	-.164
270.000	-.167	-.164	-.164

MACH (1) = 2.498 BETAT (2) = -6.300

X/LNP	.250	.500	.750
PHI			
.000	-.154	-.159	
90.000	-.157	-.158	-.159
135.000	-.139	-.149	-.164
180.000	-.037	-.042	-.160
225.000	-.171	-.164	-.159
270.000	-.163	-.161	-.159

MACH (1) = 2.498 BETAT (3) = -4.190

X/LNP	.250	.500	.750
PHI			
.000	-.154	-.154	
90.000	-.157	-.156	-.155
135.000	-.129	-.152	-.159
180.000	-.018	-.061	-.158
225.000	-.162	-.160	-.157
270.000	-.157	-.155	-.153

MACH (1) = 2.498 BETAT (4) = -2.070

X/LNP	.250	.500	.750
PHI			
.000	-.149	-.149	
90.000	-.151	-.150	-.150
135.000	-.143	-.127	-.154
180.000	.010	-.073	-.152
225.000	-.160	-.149	-.156
270.000	-.151	-.147	-.151

MACH (1) = 2.498 BETAT (5) = 2.170

X/LNP	.250	.500	.750
PHI			
.000	-.147	-.151	
90.000	-.152	-.150	-.151
135.000	-.171	-.141	-.152
180.000	-.023	-.062	-.153
225.000	-.144	-.147	-.155

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND08)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 2.175

X/LNP	.250	.500	.750
PHI			
270.000	-.1550	-.1510	-.1520

MACH (1) = 2.498 BETAT (6) = 4.300

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1550	
90.000	-.1580	-.1560	-.1560
135.000	-.1660	-.1580	-.1560
180.000	-.0960	-.0820	-.1560
225.000	-.1320	-.1560	-.1640
270.000	-.1580	-.1550	-.1530

MACH (1) = 2.498 BETAT (7) = 6.425

X/LNP	.250	.500	.750
PHI			
.000	-.1550	-.1570	
90.000	-.1610	-.1590	-.1590
135.000	-.1720	-.1620	-.1610
180.000	.0000	-.0560	-.1640
225.000	-.1510	-.1590	-.1690
270.000	-.1620	-.1600	-.1590

MACH (1) = 2.498 BETAT (8) = 8.550

X/LNP	.250	.500	.750
PHI			
.000	-.1580	-.1620	
90.000	-.1650	-.1640	-.1630
135.000	-.1750	-.1680	-.1640
180.000	-.0340	-.0260	-.1700
225.000	-.1440	-.1570	-.1710
270.000	-.1630	-.1650	-.1650

MACH (2) = 2.999 BETAT (1) = -8.580

X/LNP	.250	.500	.750
PHI			
.000	-.1180	-.1240	
90.000	-.1220	-.1220	-.1220
135.000	-.1000	-.1060	-.1250
180.000	-.0390	-.0440	-.1240
225.000	-.1290	-.1240	-.1230
270.000	-.1220	-.1210	-.1230

MACH (2) = 2.999 BETAT (2) = -6.425

X/LNP	.250	.500	.750
PHI			
.000	-.0770	-.1210	
90.000	-.0910	-.1200	.0960
135.000	-.0920	-.0970	-.0880
180.000	-.0190	-.0340	-.0880
225.000	-.1320	-.0880	-.0880

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND08)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.425

X/LNP	.250	.500	.750
PHI			
270.000	-.1220	-.0900	-.0880

MACH (2) = 2.999 BETAT (3) = -4.260

X/LNP	.250	.500	.750
PHI			
.000	-.0810	-.1180	
90.000	-.0790	-.1250	-.1000
135.000	-.0780	-.1130	-.0990
180.000	.0220	-.0170	-.0980
225.000	-.1280	-.0990	-.0980
270.000	-.1200	-.1000	-.0980

MACH (2) = 2.999 BETAT (4) = -2.100

X/LNP	.250	.500	.750
PHI			
.000	-.1120	-.1160	
90.000	-.1150	-.1150	-.1180
135.000	-.0920	-.0730	-.1160
180.000	.0160	-.0260	-.1140
225.000	-.1260	-.1100	-.1170
270.000	-.1170	-.1160	-.1160

MACH (2) = 2.999 BETAT (5) = 2.210

X/LNP	.250	.500	.750
PHI			
.000	-.1140	-.1160	
90.000	-.1160	-.1160	-.1160
135.000	-.1290	-.1040	-.1190
180.000	.0030	-.0480	-.1160
225.000	-.0990	-.0880	-.1160
270.000	-.1160	-.1150	-.1160

MACH (2) = 2.999 BETAT (6) = 4.370

X/LNP	.250	.500	.750
PHI			
.000	-.1150	-.1190	
90.000	-.1210	-.1210	-.1200
135.000	-.1250	-.1010	-.1220
180.000	.0030	-.0480	-.1160
225.000	-.0930	-.1100	-.1230
270.000	-.1190	-.1200	-.1180

MACH (2) = 2.999 BETAT (7) = 6.540

X/LNP	.250	.500	.750
PHI			
.000	-.1170	-.1180	
90.000	-.1190	-.1190	-.1190
135.000	-.1210	-.1150	-.1210
180.000	-.0110	-.0460	-.1150
225.000	-.0990	-.1080	-.1220

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBNDU0)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (7) = 6.540

X/LNP	.250	.500	.750
PHI			
270.000	-.1200	-.1200	-.1180

MACH (2) = 2.999 BETAT (8) = 8.750

X/LNP	.250	.500	.750
PHI			
.000	-.1160	-.1200	
90.000	-.1210	-.1200	-.1200
135.000	-.1280	-.1230	-.1210
180.000	-.0690	-.0390	-.1250
225.000	-.1040	-.1190	-.1250
270.000	-.1190	-.1220	-.1220

MACH (3) = 3.502 BETAT (1) = -8.720

X/LNP	.250	.500	.750
PHI			
.000	-.0880	-.1040	
90.000	-.0990	-.1000	-.1040
135.000	-.0710	-.0620	-.1030
180.000	-.0240	-.0410	-.1040
225.000	-.1040	-.1020	-.1030
270.000	-.1040	-.1020	-.1040

MACH (3) = 3.502 BETAT (2) = -6.530

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0990	
90.000	-.0980	-.1010	-.1010
135.000	-.0710	-.0700	-.0990
180.000	-.0230	-.0430	-.0990
225.000	-.0970	-.0970	-.1000
270.000	-.1010	-.0990	-.0990

MACH (3) = 3.502 BETAT (3) = -4.330

X/LNP	.250	.500	.750
PHI			
.000	-.0890	-.1000	
90.000	-.1000	-.1000	-.0990
135.000	-.0690	-.0860	-.0990
180.000	.0200	-.0130	-.1000
225.000	-.1010	-.0810	-.1040
270.000	-.1000	-.1010	-.1030

MACH (3) = 3.502 BETAT (4) = -2.140

X/LNP	.250	.500	.750
PHI			
.000	-.0860	-.0980	
90.000	-.0970	-.1000	-.0980
135.000	-.0660	-.0500	-.1000
180.000	.0170	-.0060	-.0950
225.000	-.0980	-.0920	-.0980

AMES 87-707 IA9 J2A + S3 + T9 UPPER MPS NOZZLE (RBND48)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = -2.140

X/LNP	.250	.500	.750
PHI			
270.000	-.1000	-.0980	-.0950

MACH (3) = 3.502 BETAT (5) = 2.260

X/LNP	.250	.500	.750
PHI			
.000	-.0940	-.1040	
90.000	-.1020	-.1050	-.1040
135.000	-.1050	-.0870	-.1050
180.000	.0100	-.0210	-.1000
225.000	-.0770	-.0500	-.1040
270.000	-.1050	-.1040	-.1050

MACH (3) = 3.502 BETAT (6) = 4.460

X/LNP	.250	.500	.750
PHI			
.000	-.0920	-.1030	
90.000	-.1040	-.1050	-.1040
135.000	-.0920	-.0770	-.1060
180.000	.0130	-.0220	-.0990
225.000	-.0740	-.0810	-.1030
270.000	-.1020	-.1020	-.1040

MACH (3) = 3.502 BETAT (7) = 6.660

X/LNP	.250	.500	.750
PHI			
.000	-.0920	-.1030	
90.000	-.1020	-.1010	-.1030
135.000	-.0870	-.1040	-.1030
180.000	-.0150	-.0410	-.1000
225.000	-.0830	-.0700	-.1030
270.000	-.1030	-.1010	-.1040

MACH (3) = 3.502 BETAT (8) = 8.860

X/LNP	.250	.500	.750
PHI			
.000	-.0930	-.1040	
90.000	-.1040	-.1060	-.1040
135.000	-.1090	-.1060	-.1060
180.000	-.0230	-.0250	-.1080
225.000	-.0830	-.0840	-.1080
270.000	-.1030	-.1030	-.1040

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND09) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	6.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.419

X/LNP	.250	.500	.750
PHI			
.000	-.1590	-.1620	
90.000	-.1630	-.1660	-.1640
135.000	-.1500	-.1570	-.1700
180.000	-.0840	-.0650	-.1690
225.000	-.1800	-.1690	-.1660
270.000	-.1670	-.1650	-.1640

MACH (1) = 2.498 BETAT (2) = -6.290

X/LNP	.250	.500	.750
PHI			
.000	-.1600	-.1620	
90.000	-.1630	-.1630	-.1620
135.000	-.1540	-.1560	-.1690
180.000	-.0540	-.0700	-.1620
225.000	-.1740	-.1700	-.1650
270.000	-.1640	-.1620	-.1640

MACH (1) = 2.498 BETAT (3) = -4.170

X/LNP	.250	.500	.750
PHI			
.000	-.1520	-.1540	
90.000	-.1580	-.1560	-.1530
135.000	-.1350	-.1510	-.1590
180.000	-.0170	-.0460	-.1560
225.000	-.1640	-.1610	-.1570
270.000	-.1590	-.1570	-.1560

MACH (1) = 2.498 BETAT (4) = -2.060

X/LNP	.250	.500	.750
PHI			
.000	-.1490	-.1510	
90.000	-.1500	-.1520	-.1510
135.000	-.1440	-.1480	-.1530
180.000	.0040	-.0700	-.1540
225.000	-.1615	-.1530	-.1550
270.000	-.1500	-.1480	-.1500

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNP	.250	.500	.750
PHI			
.000	-.1490	-.1510	
90.000	-.1530	-.1530	-.1510
135.000	-.1730	-.1470	-.1550
180.000	-.0290	-.0710	-.1570
225.000	-.1450	-.1590	-.1

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND:9)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNP	.250	.500	.750
PHI			
270.000	-.1560	-.1540	-.1550

MACH (1) = 2.498 BETAT (6) = 4.300

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1560	
90.000	-.1600	-.1580	-.1580
135.000	-.1690	-.1600	-.1600
180.000	-.0090	-.0520	-.1550
225.000	-.1460	-.1580	-.1640
270.000	-.1580	-.1570	-.1550

MACH (1) = 2.498 BETAT (7) = 6.440

X/LNP	.250	.500	.750
PHI			
.000	-.1570	-.1590	
90.000	-.1600	-.1610	-.1610
135.000	-.1690	-.1620	-.1620
180.000	-.0250	-.0890	-.1640
225.000	-.1560	-.1610	-.1650
270.000	-.1610	-.1600	-.1580

MACH (1) = 2.498 BETAT (8) = 8.570

X/LNP	.250	.500	.750
PHI			
.000	-.1630	-.1650	
90.000	-.1650	-.1650	-.1650
135.000	-.1800	-.1710	-.1660
180.000	-.0360	-.0940	-.1700
225.000	-.1540	-.1630	-.1710
270.000	-.1650	-.1660	-.1630

MACH (2) = 2.999 BETAT (1) = -8.560

X/LNP	.250	.500	.750
PHI			
.000	-.1220	-.1260	
90.000	-.1250	-.1270	-.1260
135.000	-.1100	-.1100	-.1290
180.000	-.0520	-.0600	-.1250
225.000	-.1320	-.1290	-.1280
270.000	-.1270	-.1270	-.1250

MACH (2) = 2.999 BETAT (2) = -6.400

X/LNP	.250	.500	.750
PHI			
.000	-.1180	-.1230	
90.000	-.1220	-.1220	-.1240
135.000	-.1120	-.1130	-.1250
180.000	-.0210	-.0320	-.1260
225.000	-.1300	-.1200	-.1250

AMES 87-707 IA9 OBA + S3 + T9 UPPER MPS NOZZLE (RBNDU9)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.400

X/LNP	.250	.500	.750
PHI			
270.000	-.1240	-.1220	-.1210

MACH (2) = 2.999 BETAT (3) = -4.250

X/LNP	.250	.500	.750
PHI			
.000	-.1170	-.1200	
90.000	-.1210	-.1200	-.1190
135.000	-.0960	-.1100	-.1200
180.000	-.0070	-.0370	-.1200
225.000	-.1270	-.1140	-.1210
270.000	-.1220	-.1210	-.1200

MACH (2) = 2.999 BETAT (4) = -2.100

X/LNP	.250	.500	.750
PHI			
.000	-.1140	-.1180	
90.000	-.1170	-.1180	-.1210
135.000	-.1030	-.1080	-.1200
180.000	-.0040	-.0410	-.1160
225.000	-.1250	-.1160	-.1190
270.000	-.1210	-.1180	-.1170

MACH (2) = 2.999 BETAT (5) = 2.210

X/LNP	.250	.500	.750
PHI			
.000	-.1140	-.1190	
90.000	-.1160	-.1170	-.1200
135.000	-.1290	-.1100	-.1210
180.000	-.0160	-.0470	-.1170
225.000	-.1110	-.1190	-.1210
270.000	-.1180	-.1200	-.1190

MACH (2) = 2.999 BETAT (6) = 4.360

X/LNP	.250	.500	.750
PHI			
.000	-.1210	-.1250	
90.000	-.1230	-.1240	-.1250
135.000	-.1270	-.1020	-.1260
180.000	-.0180	-.0560	-.1210
225.000	-.1070	-.1110	-.1270
270.000	-.1240	-.1250	-.1240

MACH (2) = 2.999 BETAT (7) = 6.550

X/LNP	.250	.500	.750
PHI			
.000	-.1180	-.1220	
90.000	-.1250	-.1230	-.1220
135.000	-.1320	-.1180	-.1260
180.000	-.0300	-.0550	-.1210
225.000	-.1180	-.1220	-.1270

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND09)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (7) = 6.550

X/LNP	.250	.500	.750
PHI			
270.000	-.1230	-.1230	-.1220

MACH (2) = 2.999 BETAT (8) = 8.720

X/LNP	.250	.500	.750
PHI			
.000	-.1200	-.1240	
90.000	-.1250	-.1240	-.1250
135.000	-.1300	-.1280	-.1240
180.000	-.0260	-.0820	-.1230
225.000	-.1160	-.1200	-.1270
270.000	-.1240	-.1250	-.1240

MACH (3) = 3.502 BETAT (1) = -8.710

X/LNP	.250	.500	.750
PHI			
.000	-.0970	-.1070	
90.000	-.1070	-.1080	-.1080
135.000	-.0860	-.0850	-.1100
180.000	-.0480	-.0580	-.1080
225.000	-.1080	-.1080	-.1080
270.000	-.1080	-.1080	-.1080

MACH (3) = 3.502 BETAT (2) = -6.510

X/LNP	.250	.500	.750
PHI			
.000	-.0930	-.1020	
90.000	-.1020	-.1050	-.1030
135.000	-.0840	-.0910	-.1050
180.000	-.0300	-.0410	-.1020
225.000	-.1070	-.1030	-.1050
270.000	-.1070	-.1040	-.1040

MACH (3) = 3.502 BETAT (3) = -4.320

X/LNP	.250	.500	.750
PHI			
.000	-.0920	-.1040	
90.000	-.1030	-.1040	-.1060
135.000	-.0810	-.0940	-.1060
180.000	-.0210	-.0260	-.1040
225.000	-.1090	-.0950	-.1080
270.000	-.1090	-.1070	-.1070

MACH (3) = 3.502 BETAT (4) = -2.130

X/LNP	.250	.500	.750
PHI			
.000	-.0920	-.1030	
90.000	-.1040	-.1040	-.1040
135.000	-.0810	-.0840	-.1060
180.000	-.0140	-.0360	-.1040
225.000	-.1040	-.1000	-.1080

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND09)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = -2.130

X/LNP	.250	.500	.750
PHI			
270.000	-.1040	-.1040	-.1040

MACH (3) = 3.502 BETAT (5) = 2.260

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0980	
90.000	-.0980	-.0980	-.0990
135.000	-.1010	-.0950	-.1000
180.000	-.0100	-.0350	-.0960
225.000	-.0770	-.0860	-.1010
270.000	-.0990	-.0990	-.0990

MACH (3) = 3.502 BETAT (6) = 4.470

X/LNP	.250	.500	.750
PHI			
.000	-.0930	-.1040	
90.000	-.1030	-.1040	-.1060
135.000	-.0900	-.0750	-.1060
180.000	-.0120	-.0370	-.1010
225.000	-.0840	-.0890	-.1040
270.000	-.1040	-.1020	-.1040

MACH (3) = 3.502 BETAT (7) = 6.670

X/LNP	.250	.500	.750
PHI			
.000	-.0930	-.1030	
90.000	-.1030	-.1020	-.1030
135.000	-.1010	-.0960	-.1040
180.000	-.0290	-.0370	-.1010
225.000	-.0920	-.0960	-.1060
270.000	-.1030	-.1030	-.1030

MACH (3) = 3.502 BETAT (8) = 8.880

X/LNP	.250	.500	.750
PHI			
.000	-.0950	-.1090	
90.000	-.1080	-.1080	-.1090
135.000	-.1090	-.1090	-.1100
180.000	-.0270	-.0730	-.1080
225.000	-.0930	-.0940	-.1100
270.000	-.1080	-.1070	-.1080

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND10) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	8.000	CRBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.380

X/LNP	.250	.500	.750
PHI			
.000	-.1630	-.1670	
90.000	-.1670	-.1650	-.1650
135.000	-.1540	-.1580	-.1700
180.000	-.0820	-.0990	-.1680
225.000	-.1740	-.1720	-.1690
270.000	-.1670	-.1650	-.1650

MACH (1) = 2.498 BETAT (2) = -6.270

X/LNP	.250	.500	.750
PHI			
.000	-.1580	-.1610	
90.000	-.1620	-.1640	-.1630
135.000	-.1500	-.1520	-.1660
180.000	-.0580	-.0760	-.1610
225.000	-.1710	-.1680	-.1620
270.000	-.1650	-.1620	-.1620

MACH (1) = 2.498 BETAT (3) = -4.170

X/LNP	.250	.500	.750
PHI			
.000	-.1520	-.1540	
90.000	-.1580	-.1540	-.1550
135.000	-.1440	-.1540	-.1590
180.000	-.0210	-.0440	-.1540
225.000	-.1650	-.1590	-.1570
270.000	-.1580	-.1550	-.1570

MACH (1) = 2.498 BETAT (4) = -2.060

X/LNP	.250	.500	.750
PHI			
.000	-.1520	-.1550	
90.000	-.1560	-.1560	-.1550
135.000	-.1470	-.1570	-.1570
180.000	-.0070	-.0710	-.1560
225.000	-.1680	-.1570	-.1570
270.000	-.1570	-.1540	-.1550

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1540	
90.000	-.1540	-.1540	-.1510
135.000	-.1710	-.1490	-.1570
180.000	-.0310	-.0740	-.1550
225.000	-.1430	-.1590	-.1570

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND19)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNP	.250	.500	.750
PHI			
270.000	-.1540	-.1550	-.1550

MACH (1) = 2.498 BETAT (6) = 4.320

X/LNP	.250	.500	.750
PHI			
.000	-.1550	-.1540	
90.000	-.1580	-.1580	-.1560
135.000	-.1650	-.1590	-.1600
180.000	-.0260	-.0470	-.1570
225.000	-.1590	-.1580	-.1590
270.000	-.1590	-.1550	-.1540

MACH (1) = 2.4 BETAT (7) = 6.450

X/LNP	.250	.500	.750
PHI			
.000	-.1610	-.1630	
90.000	-.1660	-.1650	-.1640
135.000	-.1720	-.1630	-.1680
180.000	-.0580	-.0830	-.1680
225.000	-.1650	-.1610	-.1680
270.000	-.1650	-.1650	-.1610

MACH (1) = 2.498 BETAT (8) = 8.580

X/LNP	.250	.500	.750
PHI			
.000	-.1630	-.1670	
90.000	-.1700	-.1680	-.1690
135.000	-.1770	-.1740	-.1690
180.000	-.0780	-.1020	-.1720
225.000	-.1660	-.1650	-.1680
270.000	-.1670	-.1670	-.1650

MACH (2) = 2.999 BETAT (1) = -8.540

X/LNP	.250	.500	.750
PHI			
.000	-.1210	-.1260	
90.000	-.1250	-.1250	-.1280
135.000	-.1160	-.1120	-.1260
180.000	-.0720	-.0720	-.1270
225.000	-.1260	-.1280	-.1260
270.000	-.1280	-.1260	-.1270

MACH (2) = 2.999 BETAT (2) = -6.390

X/LNP	.250	.500	.750
PHI			
.000	-.1200	-.1220	
90.000	-.1230	-.1230	-.1230
135.000	-.1200	-.1180	-.1260
180.000	-.0410	-.0520	-.1230
225.000	-.1270	-.1240	-.1260

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND10)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.390

X/LNP	.250	.500	.750
PHI			
270.000	-.1250	-.1260	-.1250

MACH (2) = 2.999 BETAT (3) = -4.240

X/LNP	.250	.500	.750
PHI			
.000	-.1250	-.1240	
90.000	-.1230	-.1220	-.1250
135.000	-.1020	-.1180	-.1260
180.000	-.0180	-.0390	-.1220
225.000	-.1280	-.1170	-.1260
270.000	-.1230	-.1230	-.1240

MACH (2) = 2.999 BETAT (4) = -2.090

X/LNP	.250	.500	.750
PHI			
.000	-.1150	-.1190	
90.000	-.1200	-.1200	-.1210
135.000	-.1070	-.1170	-.1210
180.000	-.0210	-.0470	-.1190
225.000	-.1260	-.1200	-.1230
270.000	-.1220	-.1200	-.1200

MACH (2) = 2.999 BETAT (5) = 2.230

X/LNP	.250	.500	.750
PHI			
.000	-.1150	-.1200	
90.000	-.1210	-.1180	-.1210
135.000	-.1310	-.1160	-.1210
180.000	-.0310	-.0560	-.1190
225.000	-.1130	-.1210	-.1230
270.000	-.1210	-.1210	-.1210

MACH (2) = 2.999 BETAT (6) = 4.400

X/LNP	.250	.500	.750
PHI			
.000	-.1160	-.1200	
90.000	-.1190	-.1200	-.1190
135.000	-.1250	-.1190	-.1230
180.000	-.0220	-.0270	-.1200
225.000	-.1150	-.1180	-.1240
270.000	-.1210	-.1210	-.1210

MACH (2) = 2.999 BETAT (7) = 6.570

X/LNP	.250	.500	.750
PHI			
.000	-.1180	-.1240	
90.000	-.1250	-.1250	-.1250
135.000	-.1210	-.1250	-.1250
180.000	-.0450	-.0610	-.1250
225.000	-.1260	-.1240	-.1270

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND10)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (7) = 6.570

X/LNP	.250	.500	.750
PHI			
270.000	-.1260	-.1260	-.1250

MACH (2) = 2.999 BETAT (8) = 8.740

X/LNP	.250	.500	.750
PHI			
.000	-.1200	-.1240	
90.000	-.1260	-.1260	-.1260
135.000	-.1260	-.1280	-.1260
180.000	-.0520	-.0860	-.1260
225.000	-.1210	-.1190	-.1270
270.000	-.1240	-.1240	-.1220

MACH (3) = 3.502 BETAT (1) = -8.690

X/LNP	.250	.500	.750
PHI			
.000	-.0910	-.1030	
90.000	-.1010	-.1040	-.1020
135.000	-.0890	-.0850	-.1050
180.000	-.0550	-.0600	-.1050
225.000	-.1050	-.1020	-.1050
270.000	-.1050	-.1050	-.1050

MACH (3) = 3.502 BETAT (2) = -6.500

X/LNP	.250	.500	.750
PHI			
.000	-.0940	-.1050	
90.000	-.1040	-.1040	-.1040
135.000	-.0940	-.0960	-.1060
180.000	-.0420	-.0510	-.1040
225.000	-.1040	-.1010	-.1050
270.000	-.1030	-.1040	-.1030

MACH (3) = 3.502 BETAT (3) = -4.310

X/LNP	.250	.500	.750
PHI			
.000	-.0930	-.1060	
90.000	-.1050	-.1050	-.1050
135.000	-.0850	-.0950	-.1070
180.000	-.0300	-.0420	-.1050
225.000	-.1030	-.0930	-.1050
270.000	-.1050	-.1030	-.1050

MACH (3) = 3.502 BETAT (4) = -2.130

X/LNP	.250	.500	.750
PHI			
.000	.0900	-.1020	
90.000	-.1030	-.1020	-.1030
135.000	-.0870	-.0970	-.1050
180.000	-.0270	-.0410	-.1040
225.000	-.1040	-.1030	-.1050

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBNC10)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = -2.130

X/LNP	.250	.500	.750
PHI			
270.000	-.1030	-.1030	-.1010

MACH (3) = 3.502 BETAT (5) = 2.260

X/LNP	.250	.500	.750
PHI			
.000	-.0920	-.1010	
90.000	-.0980	-.1020	-.1020
135.000	-.1060	-.0990	-.1020
180.000	-.0310	-.0440	-.0990
225.000	-.0880	-.0990	-.1010
270.000	-.0990	-.1010	-.1020

MACH (3) = 3.502 BETAT (6) = 4.480

X/LNP	.250	.500	.750
PHI			
.000	-.0930	-.1040	
90.000	-.1040	-.1060	-.1050
135.000	-.0970	-.0840	-.1070
180.000	-.0260	-.0420	-.1040
225.000	-.0880	-.0950	-.1060
270.000	-.1040	-.1050	-.1040

MACH (3) = 3.502 BETAT (7) = 6.695

X/LNP	.250	.500	.750
PHI			
.000	-.0890	-.1020	
90.000	-.1030	-.1030	-.1030
135.000	-.1000	-.1020	-.1030
180.000	-.0430	-.0590	-.1020
225.000	-.0960	-.0960	-.1050
270.000	-.1020	-.1020	-.1030

MACH (3) = 3.502 BETAT (8) = 8.900

X/LNP	.250	.500	.750
PHI			
.000	-.0950	-.1070	
90.000	-.1050	-.1060	-.1060
135.000	-.1090	-.1070	-.1080
180.000	-.0420	-.0660	-.1090
225.000	-.0980	-.0990	-.1090
270.000	-.1060	-.1070	-.1050

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND11) (10 MAY 73)

REFERENCE DATA

SREF =	2.421[illegible] SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	-8.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.390

X/LNP	.250	.500	.750
PHI			
.000	-.1260	-.1300	
90.000	-.1370	-.1320	-.1280
135.000	-.0150	-.0940	-.1350
180.000	.1280	.0160	-.1320
225.000	-.1380	-.1460	-.1320
270.000	-.1320	-.1290	-.1280

MACH (1) = 2.498 BETAT (2) = -6.270

X/LNP	.250	.500	.750
PHI			
.000	-.1270	-.1300	
90.000	-.1360	-.1330	-.1270
135.000	-.0300	-.1070	-.1380
180.000	.1190	.0350	-.1310
225.000	-.1340	-.1370	-.1420
270.000	-.1320	-.1320	-.1300

MACH (1) = 2.498 BETAT (3) = -4.160

X/LNP	.250	.500	.750
PHI			
.000	-.1250	-.1270	
90.000	-.1310	-.1290	-.1240
135.000	-.0540	-.1270	-.1350
180.000	.2090	.0670	-.1250
225.000	-.1320	-.1180	-.1350
270.000	-.1320	-.1300	-.1290

MACH (1) = 2.498 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1240	-.1250	
90.000	-.1270	-.1250	-.1250
135.000	-.1390	-.1310	-.1330
180.000	.1810	.1520	-.1230
225.000	-.1410	-.1260	-.1360
270.000	-.1300	-.1270	-.1270

MACH (1) = 2.498 BETAT (5) = 4.330

X/LNP	.250	.500	.750
PHI			
.000	-.1230	-.1260	
90.000	-.1320	-.1290	-.1250
135.000	-.1400	-.1140	-.1350
180.000	.1820	.0710	-.1240
225.000	-.0640	-.1140	-.1[illegible]

DATE 18 SEP 73 TABULATED PRESCUFE DATA - IA9C

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND11)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 4.330

X/LNP	.250	.500	.750
PHI			
270.000	-.1300	-.1270	-.1230

MACH (1) = 2.498 BETAT (6) = 6.460

X/LNP	.250	.500	.750
PHI			
.000	-.1250	-.1320	
90.000	-.1330	-.1280	-.1280
135.000	-.1450	-.1330	-.1370
180.000	.1620	.0730	-.1330
225.000	-.0490	-.0740	-.1390
270.000	-.1350	-.1320	-.1290

MACH (1) = 2.498 BETAT (7) = 8.600

X/LNP	.250	.500	.750
PHI			
.000	-.1270	-.1290	
90.000	-.1340	-.1320	-.1300
135.000	-.1550	-.1470	-.1460
180.000	.1890	.1740	-.1450
225.000	-.0330	-.0350	-.1390
270.000	-.1340	-.1330	-.1300

MACH (2) = 2.999 BETAT (1) = -8.560

X/LNP	.250	.500	.750
PHI			
.000	-.1070	-.1090	
90.000	-.1160	-.1140	-.1070
135.000	-.0090	-.0100	-.1080
180.000	.0990	.0930	-.1140
225.000	-.1170	-.1180	-.1160
270.000	-.1110	-.1110	-.1090

MACH (2) = 2.999 BETAT (2) = -6.410

X/LNP	.250	.500	.750
PHI			
.000	-.1010	-.1050	
90.000	-.1070	-.1060	-.1050
135.000	.0020	-.0240	-.1070
180.000	.1220	.0690	-.1010
225.000	-.0990	-.1070	-.1150
270.000	-.1090	-.1070	-.1050

MACH (2) = 2.999 BETAT (3) = -4.260

X/LNP	.250	.500	.750
PHI			
.000	-.1060	-.1080	
90.000	-.1130	-.1120	-.1100
135.000	.0050	-.0590	-.1130
180.000	.1460	.0830	-.1050
225.000	-.0920	-.0970	-.1200

AMES 67-707 IA9 CRA + S3 + T9 UPPER HPS NOZZLE (RBND11)

SECTION (1)HPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.280

X/LNP	.250	.500	.750
PHI			
270.000	-.1120	-.1110	-.1110

MACH (2) = 2.999 BETAT (4) = .050

X/LNP	.250	.500	.750
PHI			
.000	-.1080	-.1090	
90.000	-.1110	-.1120	-.1110
135.000	-.0650	-.0910	-.1130
180.000	.1710	.1730	-.0980
225.000	-.0850	-.0980	-.1150
270.000	-.1120	-.1110	-.1120

MACH (2) = 2.999 BETAT (5) = 4.400

X/LNP	.250	.500	.750
PHI			
.000	-.1060	-.1080	
90.000	-.1140	-.1110	-.1110
135.000	-.0920	-.0840	-.1180
180.000	.1390	.1660	-.1020
225.000	-.0310	-.0420	-.1100
270.000	-.1120	-.1100	-.1070

MACH (2) = 2.999 BETAT (6) = 6.580

X/LNP	.250	.500	.750
PHI			
.000	-.1060	-.1090	
90.000	-.1160	-.1140	-.1100
135.000	-.1100	-.1000	-.1170
180.000	.1195	.1740	-.1150
225.000	-.0830	-.0290	-.1070
270.000	-.1100	-.1110	-.1080

MACH (2) = 2.999 BETAT (7) = 8.750

X/LNP	.250	.500	.750
PHI			
.000	-.1080	-.1100	
90.000	-.1140	-.1130	-.1120
135.000	-.1190	-.1200	-.1190
180.000	.0820	.1930	-.1220
225.000	-.0310	-.0260	.1120
270.000	-.1160	-.1160	-.1120

MACH (3) = 3.502 BETAT (1) = -8.710

X/LNP	.250	.500	.750
PHI			
.000	-.0890	-.0890	
90.000	-.0940	-.0950	-.0920
135.000	.0080	.0160	-.0830
180.000	.0660	.1220	-.0890
225.000	-.0840	-.0880	-.0930

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBND11)

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (1) = -8.710

X/LNP	.250	.500	.750
PHI			
270.000	-.0900	-.0900	-.0910

MACH (3) = 3.502 BETAT (2) = -6.520

X/LNP	.250	.500	.750
PHI			
.000	-.0780	-.0870	
90.000	-.0910	-.0910	-.0890
135.000	.0110	-.0090	-.0830
180.000	.1040	.1190	-.0840
225.000	-.0740	-.0820	-.0950
270.000	-.0870	-.0890	-.0890

MACH (3) = 3.502 BETAT (3) = -4.330

X/LNP	.250	.500	.750
PHI			
.000	-.0750	-.0840	
90.000	-.0880	-.0890	-.0850
135.000	.0320	-.0320	-.0820
180.000	.1150	.1510	-.0790
225.000	-.0610	-.0710	-.0870
270.000	-.0850	-.0840	-.0850

MACH (3) = 3.502 BETAT (4) = .050

X/LNP	.250	.500	.750
PHI			
.000	-.0740	-.0820	
90.000	-.0900	-.0850	-.0840
135.000	.0600	-.0490	-.0840
180.000	.1320	.1530	-.0680
225.000	-.0160	-.0560	-.0870
270.000	-.0880	-.0840	-.0830

MACH (3) = 3.502 BETAT (5) = 4.470

X/LNP	.250	.500	.750
PHI			
.000	-.0730	-.0820	
90.000	-.0830	-.0830	-.0830
135.000	-.0470	-.0610	-.0900
180.000	.1040	.1990	-.0730
225.000	-.0440	-.0440	-.0790
270.000	-.0830	-.0820	-.0810

MACH (3) = 3.502 BETAT (6) = 8.690

X/LNP	.250	.500	.750
PHI			
.000	-.0720	-.0790	
90.000	-.0820	-.0830	-.0820
135.000	-.0710	-.0720	-.0890
180.000	.0830	.1570	-.0820
225.000	-.0670	.0140	-.0850

AMES 67-707 IAB CEA + S3 + T9 UPPER MPS NOZZLE (RUN011)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 0.000

X/LNP	.250	.500	.750
PHI			
270.000	-.0840	-.0870	-.0820

MACH (3) = 3.502 BETAT (7) = 0.900

X/LNP	.250	.500	.750
PHI			
.000	-.0730	-.0820	
90.000	-.0810	-.0810	-.0820
135.000	-.0780	-.0830	-.0870
180.000	.0950	.0840	-.0840
225.000	-.0810	.0810	-.0810
270.000	-.0850	-.0790	-.0830

AMES 87-707 IA9 OEA + S3 + T9 UPPER MFS NOZZLE (RBND12) (15 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .000
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)MFS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LNP	.250	.500	.750
PHI			
.000	-.1350	-.1390	
90.000	-.1410	-.1380	-.1350
135.000	-.0600	-.0790	-.1430
180.000	.0460	-.0230	-.1440
225.000	-.1490	-.1490	-.1400
270.000	-.1390	-.1360	-.1390

MACH (1) = 2.498 BETAT (2) = -6.300

X/LNP	.250	.500	.750
PHI			
.000	-.1360	-.1380	
90.000	-.1420	-.1360	-.1340
135.000	-.0790	-.1230	-.1420
180.000	.0670	.0110	-.1360
225.000	-.1350	-.1350	-.1410
270.000	-.1400	-.1370	-.1360

MACH (1) = 2.498 BETAT (3) = -4.180

X/LNP	.250	.500	.750
PHI			
.000	-.1310	-.1320	
90.000	-.1350	-.1350	-.1280
135.000	-.0830	-.1340	-.1370
180.000	.1420	.0210	-.1330
225.000	-.1330	-.1240	-.1350
270.000	-.1350	-.1330	-.1330

MACH (1) = 2.498 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1280	-.1300	
90.000	-.1330	-.1300	-.1290
135.000	-.1430	-.1370	-.1380
180.000	.0980	.0080	-.1280
225.000	-.142[illegible]	-.1330	-.1370
270.000	-.132[illegible]	-.1310	-.1320

MACH (1) = 2.498 BETAT (5) = 4.310

X/LNP	.250	.500	.750
PHI			
.000	-.1310	-.1360	
90.000	-.1410	-.1370	-.1350
135.000	-.1520	-.1220	-.1390
180.000	.1030	-.0150	-.1350
225.000	-.1920	-.1300	-.1490

AMES 87-757 IA9 02A + S3 + T9 UPPER MPS NOZZLE (RBND12)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 4.319

X/LNP	.250	.500	.750
PHI			
270.000	-.1450	-.1390	-.1350

MACH (1) = 2.498 BETAT (6) = 6.430

X/LNP	.250	.500	.750
PHI			
.000	-.1350	-.1370	
90.000	-.1410	-.1380	-.1390
135.000	-.1470	-.1360	-.1420
180.000	.0830	.0030	-.1440
225.000	-.0910	-.1150	-.1460
270.000	-.1420	-.1400	-.1370

MACH (1) = 2.498 BETAT (7) = 8.580

X/LNP	.250	.500	.750
PHI			
.000	-.1320	-.1330	
90.000	-.1350	-.1340	-.1350
135.000	-.1520	-.1480	-.1370
180.000	.1310	.0830	-.1470
225.000	-.0740	-.1180	-.1430
270.000	-.1390	-.1340	-.1330

MACH (2) = 2.999 BETAT (1) = -8.580

X/LNP	.250	.500	.750
PHI			
.000	-.1140	-.1170	
90.000	-.1210	-.1190	-.1170
135.000	-.0450	-.0320	-.1180
180.000	.0610	.0260	-.1210
225.000	-.1250	-.1210	-.1180
270.000	-.1170	-.1170	-.1170

MACH (2) = 2.999 BETAT (2) = -6.430

X/LNP	.250	.500	.750
PHI			
.000	-.1180	-.1170	
90.000	-.1190	-.1210	-.1170
135.000	-.0430	-.0360	-.1210
180.000	.0660	.0170	-.1170
225.000	-.1130	-.1190	-.1220
270.000	-.1210	-.1190	-.1190

MACH (2) = 2.999 BETAT (3) = -4.270

X/LNP	.250	.500	.750
PHI			
.000	-.1150	-.1180	
90.000	-.1190	-.1190	-.1180
135.000	-.0380	-.0840	-.1250
180.000	.1260	.0330	-.1170
225.000	-.1010	-.0920	-.1230

AMES 67-707 IA9 C2A + S3 + T9 UPPER NPS NOZZLE (RBND12)

SECTION (1)NPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.270

PHI	X/LNP .250	.500	.750
270.000	-.1210	-.1200	-.1190

MACH (2) = 2.999 BETAT (4) = .050

PHI	X/LNP .250	.500	.750
.000	-.1120	.0000	
90.000	-.1150	-.1160	-.1140
135.000	-.0490	-.1040	-.1170
180.000	.0840	.0960	-.1040
225.000	-.0550	-.1090	-.1180
270.000	-.1150	-.1150	-.1140

MACH (2) = 2.999 BETAT (5) = 4.380

PHI	X/LNP .250	.500	.750
.000	-.1120	-.1140	
90.000	-.1200	-.1200	-.1170
135.000	-.0960	-.0750	-.1190
180.000	.1220	.0820	-.1140
225.000	-.0590	-.0660	-.1180
270.000	-.1140	-.1160	-.1120

MACH (2) = 2.999 BETAT (6) = 6.550

PHI	X/LNP .250	.500	.750
.000	-.1110	-.1130	
90.000	-.1180	-.1160	-.1140
135.000	-.1160	-.1120	-.1190
180.000	.0840	.0840	-.1190
225.000	-.0600	-.0650	-.1150
270.000	-.1130	-.1130	-.1110

MACH (2) = 2.999 BETAT (7) = 8.710

PHI	X/LNP .250	.500	.750
.000	-.1110	-.1130	
90.000	-.1140	-.1120	-.1120
135.000	-.1280	-.1250	-.1160
180.000	.0450	.1650	-.1230
225.000	-.0560	-.0400	-.1190
270.000	-.1190	-.1140	-.1140

MACH (3) = 3.502 BETAT (1) = -8.740

PHI	X/LNP .250	.500	.750
.000	-.0700	-.0800	
90.000	-.0800	-.0620	-.0800
135.000	-.0630	.0110	-.0780
180.000	.0410	.0870	-.0780
225.000	-.0800	-.0780	-.0790

AMES 87-707 IA9 02A + S3 + T9 UPPER MPS NOZZLE (RBND12)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (1) = -8.740

X/LNP	.250	.500	.750
PHI			
270.000	-.0780	-.0770	-.0770

MACH (3) = 3.502 BETAT (2) = -6.540

X/LNP	.250	.500	.750
PHI			
.000	-.0710	-.0770	
90.000	-.0810	-.0820	-.0770
135.000	-.0100	.0070	-.0780
180.000	.0600	.0890	-.0770
225.000	-.0720	-.0740	-.0830
270.000	-.0790	-.0790	-.0770

MACH (3) = 3.502 BETAT (3) = -4.350

X/LNP	.250	.500	.750
PHI			
.000	-.0730	-.0800	
90.000	-.0830	-.0830	-.0800
135.000	.0020	-.0480	-.0820
180.000	.0870	.1020	-.0770
225.000	-.0520	-.0570	-.0850
270.000	-.0800	-.0800	-.0800

MACH (3) = 3.502 BETAT (4) = .050

X/LNP	.250	.500	.750
PHI			
.000	-.0650	-.0730	
90.000	-.0790	-.0750	-.0730
135.000	-.0640	-.0540	-.0760
180.000	.0850	.0810	-.0680
225.000	-.0650	-.0540	-.0770
270.000	-.0750	-.0740	-.0730

MACH (3) = 3.502 BETAT (5) = 4.480

X/LNP	.250	.500	.750
PHI			
.000	-.0710	-.0800	
90.000	-.0810	-.0820	-.0820
135.000	-.0470	-.0490	-.0860
180.000	.0810	.1350	-.0780
225.000	-.0190	-.0030	-.0820
270.000	-.0830	-.0820	-.0820

MACH (3) = 3.502 BETAT (6) = 6.660

X/LNP	.250	.500	.750
PHI			
.000	-.0710	-.0810	
90.000	-.0810	-.0820	-.0810
135.000	-.0760	-.0790	-.0870
180.000	.0540	.1250	-.0820
225.000	-.0250	.0250	-.0820

AMES 87-707 IA9 CEA + S3 + T9 UPPER MPS NOZZLE (RBND12)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 8.660

X/LNP	.250	.500	.750
PHI			
270.000	-.0840	-.0810	-.0830

MACH (3) = 3.502 BETAT (7) = 8.660

X/LNP	.250	.500	.750
PHI			
.000	-.0790	-.0820	
90.000	-.0820	-.0820	-.0820
135.000	-.0840	-.0880	-.0860
180.000	.0500	.0470	-.0870
225.000	-.0210	.0160	-.0840
270.000	-.0850	-.0860	-.0850

AMES 87-707 IA9 CBA + S3 + T9 UPPER MPS NOZZLE (RBND13) (11 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LNP	.250	.500	.750
PHI			
.000	-.1470	-.1490	
90.000	-.1470	-.1510	-.1510
135.000	-.1010	-.1380	-.1540
180.000	-.0170	-.0160	-.1590
225.000	-.1570	-.1520	-.1500
270.000	-.1500	-.1490	-.1480

MACH (1) = 2.498 BETAT (2) = -6.300

X/LNP	.250	.500	.750
PHI			
.000	-.1460	-.1500	
90.000	-.1520	-.1520	-.1490
135.000	-.1070	-.1380	-.1540
180.000	.0220	-.0480	-.1540
225.000	-.1520	-.1570	-.1480
270.000	-.1530	-.1490	-.1480

MACH (1) = 2.498 BETAT (3) = -4.180

X/LNP	.250	.500	.750
PHI			
.000	-.1370	-.1410	
90.000	-.1420	-.1450	-.1390
135.000	-.1060	-.1270	-.1430
180.000	.0470	-.0210	-.1410
225.000	-.1470	-.1440	-.1410
270.000	-.1430	-.1420	-.1450

MACH (1) = 2.498 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1390	-.1410	
90.000	-.1430	-.1420	-.1410
135.000	-.1510	-.1480	-.1470
180.000	.0450	.0240	-.1430
225.000	-.1530	-.1470	-.1480
270.000	-.1440	-.1410	-.1420

MACH (1) = 2.498 BETAT (5) = 4.300

X/LNP	.250	.500	.750
PHI			
.000	-.1410	-.1430	
90.000	-.1470	-.1460	-.1440
135.000	-.1550	-.1430	-.1440
180.000	.0410	-.0180	-.1470
225.000	-.1230	-.1400	-.1510

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND13)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 4.300

X/LNP	.250	.500	.750
PHI			
270.000	-.1430	-.1400	-.1410

MACH (1) = 2.498 BETAT (6) = 6.420

X/LNP	.250	.500	.750
PHI			
.000	-.1410	-.1450	
90.000	-.1470	-.1450	-.1440
135.000	-.1530	-.1490	-.1460
180.000	.0420	-.0430	-.1510
225.000	-.1180	-.1440	-.1530
270.000	-.1420	-.1450	-.1430

MACH (1) = 2.498 BETAT (7) = 8.540

X/LNP	.250	.500	.750
PHI			
.000	-.1430	-.1440	
90.000	-.1480	-.1490	-.1470
135.000	-.1580	-.1540	-.1480
180.000	.0430	.0670	-.1570
225.000	-.1100	-.1360	-.1530
270.000	-.1440	-.1490	-.1460

MACH (2) = 2.999 BETAT (1) = -8.580

X/LNP	.250	.500	.750
PHI			
.000	-.1100	-.1120	
90.000	-.1130	-.1130	-.1120
135.000	-.0610	-.0570	-.1120
180.000	.0190	-.0130	-.1130
225.000	-.1170	-.1130	-.1130
270.000	-.1140	-.1120	-.1110

MACH (2) = 2.999 BETAT (2) = -6.420

X/LNP	.250	.500	.750
PHI			
.000	-.1060	-.1120	
90.000	-.1100	-.1120	-.1120
135.000	-.0650	-.0870	-.1120
180.000	.0100	-.0400	-.1090
225.000	-.1070	-.1120	-.1120
270.000	-.1120	-.1100	-.1080

MACH (2) = 2.999 BETAT (3) = -4.260

X/LNP	.250	.500	.750
PHI			
.000	-.1070	-.1110	
90.000	-.1110	-.1110	-.1100
135.000	-.0620	-.0860	-.1140
180.000	.0910	.0020	-.1070
225.000	-.1140	-.0870	-.1130

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND13)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE C

MACH (2) = 2.999 BETAT (3) = -4.260

X/LNP	.250	.500	.750
PHI			
270.000	-.1140	-.1120	-.1120

MACH (2) = 2.999 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1020	-.1080	
90.000	-.1110	-.1080	-.1070
135.000	-.0660	-.1100	-.1110
180.000	.0480	.0470	-.1050
225.000	-.0720	-.1050	-.1130
270.000	-.1110	-.1090	-.1100

MACH (2) = 2.999 BETAT (5) = 4.380

X/LNP	.250	.500	.750
PHI			
.000	-.1070	-.1120	
90.000	-.1140	-.1140	-.1120
135.000	-.1080	-.0770	-.1140
180.000	.0750	.0610	-.1120
225.000	-.0720	-.0790	-.1130
270.000	-.1110	-.1110	-.1100

MACH (2) = 2.999 BETAT (6) = 6.540

X/LNP	.250	.500	.750
PHI			
.000	-.1050	-.1090	
90.000	-.1110	-.1090	-.1090
135.000	-.1080	-.1140	-.1110
180.000	.0460	-.0460	-.1140
225.000	-.0760	-.0890	-.1130
270.000	-.1110	-.1090	-.1110

MACH (2) = 2.999 BETAT (7) = 8.690

X/LNP	.250	.500	.750
PHI			
.000	-.1030	-.1080	
90.000	-.1080	-.1100	-.1090
135.000	-.1190	-.1150	-.1100
180.000	.0460	.0890	-.1170
225.000	-.0690	-.0650	-.1150
270.000	-.1070	-.1080	-.1100

MACH (3) = 3.302 BETAT (1) = -8.750

X/LNP	.250	.500	.750
PHI			
.000	-.0730	-.0820	
90.000	-.0820	-.0840	-.0830
135.000	-.0280	-.0160	-.0830
180.000	.0110	.0180	-.0810
225.000	-.0840	-.0810	-.0820

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND13)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (1) = -8.750

X/LNP	.250	.500	.750
PHI			
270.000	-.0820	-.0810	-.0820

MACH (3) = 3.502 BETAT (2) = -6.550

X/LNP	.250	.500	.750
PHI			
.000	-.0680	-.0780	
90.000	-.0790	-.0780	-.0770
135.000	-.0320	-.0310	-.0800
180.000	.0300	.0130	-.0780
225.000	-.0760	-.0790	-.0800
270.000	-.0770	-.0780	-.0790

MACH (3) = 3.502 BETAT (3) = -4.350

X/LNP	.250	.500	.750
PHI			
.000	-.0710	-.0810	
90.000	-.0780	-.0790	-.0790
135.000	-.0320	-.0200	-.0790
180.000	.0800	.0360	-.0770
225.000	-.0790	-.0630	-.0830
270.000	-.0790	-.0790	-.0790

MACH (3) = 3.502 BETAT (4) = .050

X/LNP	.250	.500	.750
PHI			
.000	-.0680	-.0740	
90.000	-.0760	-.0760	-.0740
135.000	-.0220	-.0690	-.0760
180.000	.0480	.0500	-.0720
225.000	-.0270	-.0670	-.0790
270.000	-.0740	-.0760	-.0750

MACH (3) = 3.502 BETAT (5) = 4.450

X/LNP	.250	.500	.750
PHI			
.000	-.0730	-.0810	
90.000	-.0820	-.0820	-.0830
135.000	-.0640	-.0490	-.0840
180.000	.0840	.0670	-.0780
225.000	-.0380	-.0100	-.0820
270.000	-.0800	-.0780	-.0800

MACH (3) = 3.502 BETAT (6) = 6.650

X/LNP	.250	.500	.750
PHI			
.000	-.0740	-.0840	
90.000	-.0820	-.0830	-.0830
135.000	-.0790	-.0830	-.0850
180.000	.0290	.0580	-.0820
225.000	-.0460	-.0280	-.0850

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND13)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.650

X/LNP	.250	.500	.750
PHI			
270.000	-.0820	-.0830	-.0830

MACH (3) = 3.502 BETAT (7) = 8.840

X/LNP	.250	.500	.750
PHI			
.000	-.0740	-.0820	
90.000	-.0820	-.0820	-.0830
135.000	-.0870	-.0840	-.0840
180.000	.0670	.0660	-.0860
225.000	-.0420	-.0180	-.0850
270.000	-.0810	-.0810	-.0810

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND14) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)MPS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.410

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1570	
90.000	-.1570	-.1590	-.1560
135.000	-.1360	-.1450	-.1610
180.000	-.0540	-.0700	-.1620
225.000	-.1710	-.1590	-.1590
270.000	-.1600	-.1600	-.1590

MACH (1) = 2.498 BETAT (2) = -6.290

X/LNP	.250	.500	.750
PHI			
.000	-.1520	-.1530	
90.000	-.1550	-.1570	-.1560
135.000	-.1340	-.1470	-.1600
180.000	-.0270	-.0390	-.1530
225.000	-.1640	-.1580	-.1550
270.000	-.1580	-.1550	-.1530

MACH (1) = 2.498 BETAT (3) = -4.180

X/LNP	.250	.500	.750
PHI			
.000	-.1500	-.1540	
90.000	-.1540	-.1540	-.1520
135.000	-.1190	-.1500	-.1560
180.000	-.0060	-.0530	-.1530
225.000	-.1580	-.1570	-.1520
270.000	-.1550	-.1490	-.1520

MACH (1) = 2.498 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1430	-.1460	
90.000	-.1470	-.1440	-.1430
135.000	-.1630	-.1460	-.1480
180.000	.0200	-.0190	-.1460
225.000	-.1590	-.1480	-.1490
270.000	-.1460	-.1420	-.1420

MACH (1) = 2.498 BETAT (5) = 4.310

X/LNP	.250	.500	.750
PHI			
.000	-.1460	-.1480	
90.000	-.1510	-.1500	-.1500
135.000	-.1590	-.1530	-.1510
180.000	.0070	-.0800	-.1480
225.000	-.1240	-.1510	-.1550

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND14)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 4.310

X/LNP	.250	.500	.750
PHI			
270.000	-.1520	-.1510	-.1490

MACH (1) = 2.498 BETAT (6) = 6.430

X/LNP	.250	.500	.750
PHI			
.000	-.1460	-.1490	
90.000	-.1520	-.1520	-.1510
135.000	-.1630	-.1570	-.1530
180.000	.0130	-.0470	-.1540
225.000	-.1400	-.1500	-.1570
270.000	-.1510	-.1510	-.1500

MACH (1) = 2.498 BETAT (7) = 8.560

X/LNP	.250	.500	.750
PHI			
.000	-.1540	-.1590	
90.000	-.1590	-.1600	-.1590
135.000	-.1700	-.1620	-.1600
180.000	-.0170	-.0240	-.1630
225.000	-.1380	-.1550	-.1650
270.000	-.1580	-.1610	-.1580

MACH (2) = 2.999 BETAT (1) = -8.560

X/LNP	.250	.500	.750
PHI			
.000	-.1120	-.1160	
90.000	-.1140	-.1160	-.1160
135.000	-.0920	-.0960	-.1180
180.000	-.0340	-.0420	-.1170
225.000	-.1230	-.1160	-.1160
270.000	-.1170	-.1170	-.1170

MACH (2) = 2.999 BETAT (2) = -6.410

X/LNP	.250	.500	.750
PHI			
.000	-.1110	-.1180	
90.000	-.1150	-.1160	-.1190
135.000	-.0880	-.0940	-.1180
180.000	-.0210	-.0300	-.1140
225.000	-.1270	-.1190	-.1190
270.000	-.1200	-.1180	-.1180

MACH (2) = 2.999 BETAT (3) = -4.250

X/LNP	.250	.500	.750
PHI			
.000	-.1120	-.1180	
90.000	-.1160	-.1170	-.1160
135.000	-.0840	-.1130	-.1170
180.000	.0219	-.0160	-.1150
225.000	-.1280	-.1090	-.1200

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND14)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.250

X/LNP	.250	.500	.750
PHI			
270.000	-.1200	-.1180	-.1170

MACH (2) = 2.999 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1080	-.1120	
90.000	-.1130	-.1120	-.1120
135.000	-.1080	-.1150	-.1130
180.000	.0210	.0000	-.1130
225.000	-.1150	-.1110	-.1150
270.000	-.1150	-.1120	-.1110

MACH (2) = 2.999 BETAT (5) = 4.380

X/LNP	.250	.500	.750
PHI			
.000	-.1110	-.1170	
90.000	-.1170	-.1160	-.1170
135.000	-.1210	-.0990	-.1190
180.000	.0110	-.0440	-.1100
225.000	-.0940	-.1090	-.1190
270.000	-.1160	-.1180	-.1170

MACH (2) = 2.999 BETAT (6) = 6.550

X/LNP	.250	.500	.750
PHI			
.000	-.1120	-.1180	
90.000	-.1160	-.1160	-.1170
135.000	-.1190	-.1140	-.1190
180.000	-.0070	-.0440	-.1120
225.000	-.0990	-.1070	-.1210
270.000	-.1180	-.1190	-.1180

MACH (2) = 2.999 BETAT (7) = 8.710

X/LNP	.250	.500	.750
PHI			
.000	-.1140	-.1190	
90.000	-.1190	-.1200	-.1190
135.000	-.1280	-.1220	-.1200
180.000	-.0020	-.0330	-.1240
225.000	-.1030	-.1090	-.1240
270.000	-.1190	-.1190	-.1220

MACH (3) = 3.502 BETAT (1) = -8.730

X/LNP	.250	.500	.750
PHI			
.000	-.0900	-.1000	
90.000	-.0990	-.1010	-.1000
135.000	-.0700	-.0670	-.1010
180.000	-.0240	-.0330	-.1000
225.000	-.1000	-.1000	-.1010

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND14)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (1) = -8.730

X/LNP	.250	.500	.750
PHI			
270.000	-.0990	-.1000	-.1010

MACH (3) = 3.502 BETAT (2) = -6.530

X/LNP	.250	.500	.750
PHI			
.000	-.0940	-.1010	
90.000	-.0970	-.0990	-.1010
135.000	-.0730	-.0700	-.0990
180.000	-.0210	-.0390	-.0990
225.000	-.0970	-.0960	-.1010
270.000	-.1020	-.0990	-.0980

MACH (3) = 3.502 BETAT (3) = -4.340

X/LNP	.250	.500	.750
PHI			
.000	-.0910	-.1004	
90.000	-.0980	-.0990	-.1000
135.000	-.0690	-.0850	-.0990
180.000	.0240	-.0160	-.1000
225.000	-.1010	-.0870	-.0960
270.000	-.1000	-.10..	-.1010

MACH (3) = 3.502 BETAT (4) = .050

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0960	
90.000	-.0950	-.0980	-.0970
135.000	-.0660	-.0950	-.0990
180.000	.0260	.0180	-.0950
225.000	-.0810	-.0930	-.0980
270.000	-.0950	-.0970	-.0970

MACH (3) = 3.502 BETAT (5) = 4.450

X/LNP	.250	.500	.750
PHI			
.000	-.0840	-.0940	
90.000	-.0950	-.0950	-.0950
135.000	-.0630	-.0690	-.0980
180.000	.0240	-.0120	-.0900
225.000	-.0650	-.0740	-.0940
270.000	-.0940	-.0930	-.0930

MACH (3) = 3.502 BETAT (6) = 6.660

X/LNP	.250	.500	.750
PHI			
.000	-.0780	-.0830	
90.000	-.0860	-.0830	-.0830
135.000	-.0720	-.0850	-.0850
180.000	.0040	-.0190	-.0830
225.000	-.0650	-.0620	-.0860

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND14)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.660

X/LNP	.250	.500	.750
PHI			
270.000	-.0830	-.0840	-.0830

MACH (3) = 3.502 BETAT (7) = 8.860

X/LNP	.250	.500	.750
PHI			
.000	-.0770	-.0860	
90.000	-.0850	-.0860	-.0870
135.000	-.0880	-.0860	-.0880
180.000	-.0910	-.0840	-.0910
225.000	-.0840	-.0870	-.0870
270.000	-.0860	-.0870	-.0860

AMES 87-757 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND15) (15 MAY 73)

REFERENCE DATA

SREF =	2.4215 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8495 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8495 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	6.000	CRBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.490 BETAT (1) = -8.390

X/LNP	.250	.500	.750
PHI			
.000	-.1580	-.1610	
90.000	-.1600	-.1620	-.1600
135.000	-.1470	-.1540	-.1660
180.000	-.0730	-.0840	-.1630
225.000	-.1770	-.1670	-.1620
270.000	-.1640	-.1610	-.1620

MACH (1) = 2.490 BETAT (2) = -6.280

X/LNP	.250	.500	.750
PHI			
.000	-.1550	-.1580	
90.000	-.1600	-.1640	-.1580
135.000	-.1450	-.1510	-.1640
180.000	-.0620	-.0580	-.1560
225.000	-.1680	-.1630	-.1590
270.000	-.1600	-.1610	-.1640

MACH (1) = 2.490 BETAT (3) = -4.180

X/LNP	.250	.500	.750
PHI			
.000	-.1500	-.1520	
90.000	-.1560	-.1530	-.1510
135.000	-.1390	-.1500	-.1580
180.000	-.0670	-.0330	-.1530
225.000	-.1640	-.1580	-.1550
270.000	-.1580	-.1510	-.1540

MACH (1) = 2.490 BETAT (4) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1440	-.1440	
90.000	-.1480	-.1480	-.1450
135.000	-.1610	-.1470	-.1510
180.000	.0110	-.0440	-.1500
225.000	-.1620	-.1490	-.1480
270.000	-.1480	-.1460	-.1430

MACH (1) = 2.490 BETAT (5) = 4.310

X/LNP	.250	.500	.750
PHI			
.000	-.1470	-.1480	
90.000	-.1520	-.1510	-.1500
135.000	-.1610	-.1520	-.1520
180.000	.0050	-.0440	-.1490
225.000	-.1380	-.1520	-.1570

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND15)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 4.315

X/LNP	.250	.500	.750
PHI			
270.000	-.1520	-.1490	-.1480

MACH (1) = 2.498 BETAT (6) = 6.445

X/LNP	.250	.500	.750
PHI			
.000	-.1500	-.1520	
90.000	-.1560	-.1540	-.1550
135.000	-.1640	-.1660	-.1560
180.000	-.0080	-.0830	-.1590
225.000	-.1490	-.1550	-.1580
270.000	-.1570	-.1550	-.1520

MACH (1) = 2.498 BETAT (7) = 8.575

X/LNP	.250	.500	.750
PHI			
.000	-.1540	-.1580	
90.000	-.1610	-.1590	-.1610
135.000	-.1760	-.1670	-.1600
180.000	-.1280	-.0970	-.1660
225.000	-.1480	-.1600	-.1660
270.000	-.1600	-.1610	-.1590

MACH (2) = 2.999 BETAT (1) = -8.550

X/LNP	.250	.500	.750
PHI			
.000	-.1130	-.1190	
90.000	-.1180	-.1190	-.1170
135.000	-.0990	-.1120	-.1200
180.000	-.0430	-.0490	-.1160
225.000	-.1250	-.1200	-.1190
270.000	-.1200	-.1160	-.1160

MACH (2) = 2.999 BETAT (2) = -6.400

X/LNP	.250	.500	.750
PHI			
.000	-.1090	-.1170	
90.000	-.1140	-.1170	-.1170
135.000	-.1050	-.1050	-.1190
180.000	-.0160	-.0250	-.1140
225.000	-.1240	-.1130	-.1170
270.000	-.1190	-.1170	-.1170

MACH (2) = 2.999 BETAT (3) = -4.240

X/LNP	.250	.500	.750
PHI			
.000	-.1130	-.1160	
90.000	-.1190	-.1190	-.1180
135.000	-.0950	-.1060	-.1190
180.000	-.0060	-.0350	-.1160
225.000	-.1250	-.1110	-.1210

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND15)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.240

X/LNP	.250	.500	.750
PHI			
270.000	-.1210	-.1190	-.1180

MACH (2) = 2.999 BETAT (4) = .580

X/LNP	.250	.500	.750
PHI			
.000	-.1110	-.1160	
90.000	-.1170	-.1170	-.1160
135.000	-.1220	-.1140	-.1180
180.000	.0090	-.0260	-.1160
225.000	-.1210	-.1130	-.1160
270.000	-.1170	-.1160	-.1120

MACH (2) = 2.999 BETAT (5) = 4.390

X/LNP	.250	.500	.750
PHI			
.000	-.1130	-.1170	
90.000	-.1200	-.1180	-.1190
135.000	-.1200	-.0970	-.1210
180.000	-.0680	-.0480	-.1160
225.000	-.1010	-.1030	-.1200
270.000	-.1190	-.1190	-.1180

MACH (2) = 2.999 BETAT (6) = 6.570

X/LNP	.250	.500	.750
PHI			
.000	-.1130	-.1160	
90.000	-.1190	-.1180	-.1170
135.000	-.1240	-.1140	-.1200
180.000	-.0210	-.0500	-.1150
225.000	-.1130	-.1160	-.1200
270.000	-.1190	-.1180	-.1180

MACH (2) = 2.999 BETAT (7) = 8.730

X/LNP	.250	.500	.750
PHI			
.000	-.1130	-.1180	
90.000	-.1200	-.1200	-.1200
135.000	-.1250	-.1240	-.1200
180.000	-.0160	-.0770	-.1200
225.000	-.1150	-.1130	-.1210
270.000	-.1180	-.1200	-.1180

MACH (3) = 3.502 BETAT (1) = -8.710

X/LNP	.250	.500	.750
PHI			
.000	-.0890	-.1010	
90.000	-.1010	-.1010	-.1010
135.000	-.0810	-.0810	-.1020
180.000	-.0500	-.0460	-.1020
225.000	-.1020	-.1030	-.1020

AMES 67-707 IA9 02A + S3 + T9 UPPER MPS NOZZLE (RBND15)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (1) = -8.710

X/LNP	.250	.500	.750
PHI			
270.000	-.1000	-.1000	-.1020

MACH (3) = 3.502 BETAT (2) = -6.520

X/LNP	.250	.500	.750
PHI			
.000	-.0890	-.0980	
90.000	-.0970	-.0970	-.0970
135.000	-.0800	-.0870	-.0990
180.000	-.0220	-.0320	-.0970
225.000	-.0990	-.0970	-.1010
270.000	-.0990	-.0980	-.0980

MACH (3) = 3.502 BETAT (3) = -4.330

X/LNP	.250	.500	.750
PHI			
.000	-.0930	-.1020	
90.000	-.0970	-.1000	-.1040
135.000	-.0770	-.0950	-.0990
180.000	-.0170	-.0230	-.1010
225.000	-.1030	-.0930	-.1020
270.000	-.1040	-.1030	-.1000

MACH (3) = 3.502 BETAT (4) = .050

X/LNP	.250	.500	.750
PHI			
.000	-.0900	-.0970	
90.000	-.0990	-.0980	-.0990
135.000	-.0940	-.0970	-.1010
180.000	.0090	-.0150	-.0990
225.000	-.0970	-.0960	-.1000
270.000	-.0970	-.0970	-.0980

MACH (3) = 3.502 BETAT (5) = 4.480

X/LNP	.250	.500	.750
PHI			
.000	-.0900	-.1010	
90.000	-.0990	-.1000	-.0990
135.000	-.0840	-.0700	-.1010
180.000	-.0040	-.0310	-.1010
225.000	-.0780	-.0880	-.1010
270.000	-.0980	-.0990	-.1020

MACH (3) = 3.502 BETAT (6) = 6.680

X/LNP	.250	.500	.750
PHI			
.000	-.0880	-.0990	
90.000	-.0980	-.1000	-.0990
135.000	-.0940	-.0910	-.1010
180.000	-.0200	-.0260	-.0970
225.000	-.0860	-.0910	-.0970

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND15)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.660

X/LNP	.250	.500	.750
PHI			
270.000	-.0980	-.1010	-.0980

MACH (3) = 3.502 BETAT (7) = 8.880

X/LNP	.250	.500	.750
PHI			
.000	-.0950	-.1040	
90.000	-.1030	-.1030	-.1050
135.000	-.1060	-.1060	-.1050
180.000	-.0200	-.0690	-.1050
225.000	-.0950	-.0910	-.1040
270.000	-.1030	-.1030	-.1140

AMES 87-707 IA9 02A + S3 + T9 UPPER MPS NOZZLE (RBND16) (15 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.370

X/LNP	.250	.500	.750
PHI			
.000	-.1580	-.1610	
90.000	-.1610	-.1620	-.1600
135.000	-.1490	-.1500	-.1660
180.000	-.0700	-.0680	-.1600
225.000	-.1700	-.1700	-.1620
270.000	-.1650	-.1610	-.1640

MACH (1) = 2.498 BETAT (2) = -6.270

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1550	
90.000	-.1570	-.1560	-.1550
135.000	-.1400	-.1470	-.1590
180.000	-.0420	-.0640	-.1540
225.000	-.1620	-.1600	-.1560
270.000	-.1590	-.1560	-.1540

MACH (1) = 2.498 BETAT (3) = -4.160

X/LNP	.250	.500	.750
PHI			
.000	-.1500	-.1500	
90.000	-.1520	-.1510	-.1500
135.000	-.1370	-.1490	-.1550
180.000	-.0130	-.0280	-.1520
225.000	-.1570	-.1530	-.1550
270.000	-.1510	-.1500	-.1500

MACH (1) = 2.498 BETAT (4) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1470	-.1480	
90.000	-.1490	-.1480	-.1480
135.000	-.1570	-.1490	-.1560
180.000	.0060	-.0660	-.1500
225.000	-.1610	-.1470	-.1490
270.000	-.1480	-.1450	-.1430

MACH (1) = 2.498 BETAT (5) = 4.330

X/LNP	.250	.500	.750
PHI			
.000	-.1480	-.1490	
90.000	-.1530	-.1510	-.1510
135.000	-.1610	-.1570	-.1540
180.000	-.0120	-.0420	-.1530
225.000	-.1500	-.1520	-.1540

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBND16)

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 4.330

X/LNP	.250	.500	.750
PHI			
270.000	-.1530	-.1510	-.1470

MACH (1) = 2.498 BETAT (6) = 6.460

X/LNP	.250	.500	.750
PHI			
.000	-.1530	-.1580	
90.000	-.1610	-.1600	-.1600
135.000	-.1670	-.1630	-.1620
180.000	-.0450	-.0790	-.1630
225.000	-.1570	-.1570	-.1620
270.000	-.1600	-.1590	-.1580

MACH (1) = 2.498 BETAT (7) = 8.600

X/LNP	.250	.500	.750
PHI			
.000	-.1600	-.1630	
90.000	-.1650	-.1650	-.1640
135.000	-.1710	-.1670	-.1640
180.000	-.0660	-.1000	-.1680
225.000	-.1600	-.1580	-.1650
270.000	-.1620	-.1630	-.1610

MACH (2) = 2.999 BETAT (1) = -8.530

X/LNP	.250	.500	.750
PHI			
.000	-.1170	-.1220	
90.000	-.1200	-.1220	-.1220
135.000	-.1080	-.1090	-.1220
180.000	-.0600	-.0680	-.1230
225.000	-.1220	-.1230	-.1230
270.000	-.1220	-.1220	-.1200

MACH (2) = 2.999 BETAT (2) = -6.380

X/LNP	.250	.500	.750
PHI			
.000	-.1120	-.1190	
90.000	-.1180	-.1190	-.1190
135.000	-.1110	-.1110	-.1200
180.000	-.0330	-.0450	-.1200
225.000	-.1220	-.1180	-.1210
270.000	-.1200	-.1200	-.1180

MACH (2) = 2.999 BETAT (3) = -4.230

X/LNP	.250	.500	.750
PHI			
.000	-.1120	-.1170	
90.000	-.1160	-.1170	-.1190
135.000	-.0990	-.1140	-.1190
180.000	-.0690	-.0320	-.1190
225.000	-.1190	-.1090	-.1190

AMES 87-757 IA9 OBA + S3 + T9 UPPER MPS NOZZLE (RBND16)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = -4.230

X/LNP	.250	.500	.750
PHI			
270.000	-.1190	-.1170	-.1150

MACH (2) = 2.999 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1110	-.1140	
90.000	-.1160	-.1150	-.1150
135.000	-.1230	-.1190	-.1170
180.000	-.0030	-.0440	-.1160
225.000	-.1240	-.1130	-.1140
270.000	-.1140	-.1140	-.1140

MACH (2) = 2.999 BETAT (5) = 4.400

X/LNP	.250	.500	.750
PHI			
.000	-.1110	-.1130	
90.000	-.1160	-.1150	-.1140
135.000	-.1190	-.1030	-.1180
180.000	-.0120	-.0210	-.1140
225.000	-.1020	-.1110	-.1170
270.000	-.1140	-.1130	-.1130

MACH (2) = 2.999 BETAT (6) = 6.580

X/LNP	.250	.500	.750
PHI			
.000	-.1110	-.1150	
90.000	-.1160	-.1170	-.1150
135.000	-.1110	-.1170	-.1170
180.000	-.0310	-.0520	-.1170
225.000	-.1150	-.1130	-.1170
270.000	-.1160	-.1160	-.1150

MACH (2) = 2.999 BETAT (7) = 8.750

X/LNP	.250	.500	.750
PHI			
.000	-.1150	-.1190	
90.000	-.1220	-.1220	-.1200
135.000	-.1220	-.1240	-.1210
180.000	-.0400	-.0820	-.1210
225.000	-.1160	-.1140	-.1220
270.000	-.1210	-.1210	-.1190

MACH (3) = 3.502 BETAT (1) = -8.690

X/LNP	.250	.500	.750
PHI			
.000	-.0940	-.1030	
90.000	-.1010	-.102[illegible]	-.1020
135.000	-.0890	-.0850	-.1030
180.000	-.0590	-.0620	-.1030
225.000	-.1070	-.1040	-.1020

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND16)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (1) = -8.690

X/LNP	.250	.500	.750
PHI			
270.000	-.1040	-.1040	-.1040

MACH (3) = 3.502 BETAT (2) = -6.550

X/LNP	.250	.500	.750
PHI			
.000	-.0920	-.1020	
90.000	-.0990	-.1010	-.1020
135.000	-.0910	-.0930	-.1040
180.000	-.0370	-.0450	-.1030
225.000	-.1010	-.1010	-.1010
270.000	-.1010	-.1010	-.1010

MACH (3) = 3.502 BETAT (3) = -4.320

X/LNP	.250	.500	.750
PHI			
.000	-.0890	-.0990	
90.000	-.0970	-.0970	-.1010
135.000	-.0780	-.0910	-.1000
180.000	-.0260	-.0380	-.1000
225.000	-.1000	-.0920	-.1000
270.000	-.1000	-.1000	-.0980

MACH (3) = 3.502 BETAT (4) = .050

X/LNP	.250	.500	.750
PHI			
.000	-.0910	-.1000	
90.000	-.1000	-.1010	-.1000
135.000	-.1000	-.0970	-.1020
180.000	-.0110	-.0350	-.1020
225.000	-.1020	-.0960	-.1030
270.000	-.0990	-.0980	-.1000

MACH (3) = 3.502 BETAT (5) = 4.470

X/LNP	.250	.500	.750
PHI			
.000	-.0920	-.1030	
90.000	-.1020	-.1030	-.1030
135.000	-.0970	-.0850	-.1030
180.000	-.0220	-.0420	-.1040
225.000	-.0870	-.0960	-.1050
270.000	-.1000	-.1030	-.1020

MACH (3) = 3.502 BETAT (6) = 6.680

X/LNP	.250	.500	.750
PHI			
.000	-.0880	-.0990	
90.000	-.0980	-.0990	-.1010
135.000	-.0950	-.0990	-.0990
180.000	-.0350	-.0550	-.0990
225.000	-.0920	-.0930	-.0990

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND16)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.680

X/LNP	.250	.500	.750
PHI			
270.000	-.0990	-.0990	-.0980

MACH (3) = 3.502 BETAT (7) = 8.900

X/LNP	.250	.500	.750
PHI			
.000	-.0920	-.1020	
90.000	-.1010	-.1020	-.1030
135.000	-.1060	-.1060	-.1030
180.000	-.0320	-.0570	-.1020
225.000	-.0980	-.0960	-.1040
270.000	-.1020	-.1040	-.1010

AMES 87-757 IA9 02A + S3 + T9 UPPER MPS NOZZLE (RBND17) (15 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.390

X/LNP	.250	.500	.750
PHI			
.000	-.1320	-.1360	
90.000	-.1450	-.1390	-.1360
135.000	-.0210	-.0820	-.1340
180.000	.1260	.0070	-.1420
225.000	-.1490	-.1520	-.1420
270.000	-.1370	-.1540	-.1340

MACH (1) = 2.499 BETAT (2) = -6.280

X/LNP	.250	.500	.750
PHI			
.000	-.1280	-.1310	
90.000	-.1360	-.1340	-.1310
135.000	-.0330	-.1120	-.1310
180.000	.1110	.0360	-.1290
225.000	-.1310	-.1390	-.1410
270.000	-.1340	-.1410	-.1310

MACH (1) = 2.498 BETAT (3) = -4.180

X/LNP	.250	.500	.750
PHI			
.000	-.1260	-.1290	
90.000	-.1310	-.1300	-.1260
135.000	-.0530	-.1240	-.1260
180.000	.1990	.0650	-.1280
225.000	-.1290	-.1170	-.1340
270.000	-.1310	-.1250	-.1270

MACH (1) = 2.498 BETAT (4) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1260	-.1260	
90.000	-.1300	-.1280	-.1260
135.000	-.1410	-.1290	-.1260
180.000	.1790	.1430	-.1230
225.000	-.1430	-.1260	-.1380
270.000	-.1310	-.1280	-.1290

MACH (1) = 2.498 BETAT (5) = 4.330

X/LNP	.250	.500	.750
PHI			
.000	-.1250	-.1300	
90.000	-.1320	-.1290	-.1320
135.000	-.1420	-.1140	-.1280
180.000	.1740	.0710	-.1250
225.000	-.0660	-.1080	

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND17)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 4.330

X/LNP	.250	.500	.750
PHI			
270.000	-.1335	-.1290	-.1250

MACH (1) = 2.499 BETAT (6) = 6.479

X/LNP	.250	.500	.750
PHI			
.000	-.1290	-.1330	
90.000	-.1370	-.1350	-.1320
135.000	-.1470	-.1320	-.1320
180.000	.1610	.0730	-.1370
225.000	-.0530	-.0760	-.1420
270.000	-.1360	-.1320	-.1300

MACH (1) = 2.499 BETAT (7) = 8.600

X/LNP	.250	.500	.750
PHI			
.000	-.1270	-.1290	
90.000	-.1330	-.1310	-.1270
135.000	-.1530	-.1460	-.1270
180.000	.1820	.1800	-.1470
225.000	-.0370	-.1460	-.1390
270.000	-.1350	-.1330	-.1320

MACH (2) = 2.999 BETAT (1) = -8.540

X/LNP	.250	.500	.750
PHI			
.000	-.0990	-.1030	
90.000	-.1070	-.1070	-.1020
135.000	-.0030	.0000	-.1020
180.000	.1060	.0970	-.1080
225.000	-.1090	-.1100	-.1110
270.000	-.1040	-.1110	-.1020

MACH (2) = 2.999 BETAT (2) = -4.240

X/LNP	.250	.500	.750
PHI			
.000	-.1010	-.1020	
90.000	-.1060	-.1030	-.1040
135.000	.0120	-.0520	-.1070
180.000	.1510	.0880	-.0980
225.000	-.0840	-.0890	-.1140
270.000	-.1060	-.0960	-.1050

MACH (2) = 2.999 BETAT (3) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.0970	-.1000	
90.000	-.1030	-.1020	-.1020
135.000	-.0560	-.0810	-.1050
180.000	.1760	.1770	-.0880
225.000	-.0740	-.0880	-.1070

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND17)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = .060

X/LNP	.250	.500	.750
PHI			
270.000	-.1030	-.0900	-.1030

MACH (2) = 2.999 BETAT (4) = 4.415

X/LNP	.250	.500	.750
PHI			
.000	-.1000	-.1080	
90.000	-.1090	-.1080	-.1060
135.000	-.0960	-.0790	-.1130
180.000	.1430	.1670	-.1000
225.000	-.0260	-.0370	-.1070
270.000	-.1070	-.1040	-.1050

MACH (2) = 2.999 BETAT (5) = 8.780

X/LNP	.250	.500	.750
PHI			
.000	-.1010	-.1030	
90.000	-.1080	-.1060	-.1080
135.000	-.1120	-.1100	-.1050
180.000	.1870	.2010	-.1150
225.000	-.1260	-.0190	-.1090
270.000	-.1090	-.1080	-.1020

MACH (3) = 3.502 BETAT (1) = -8.700

X/LNP	.250	.500	.750
PHI			
.000	-.0780	-.0860	
90.000	-.0910	-.0940	-.0880
135.000	.0070	.0110	-.0670
180.000	.0660	.1260	-.0870
225.000	-.0840	-.0860	-.0910
270.000	-.0860	-.0890	-.0870

MACH (3) = 3.502 BETAT (2) = -6.519

X/LNP	.250	.500	.750
PHI			
.000	-.0780	-.0850	
90.000	-.0900	-.0890	-.0840
135.000	.0110	-.0075	-.0830
180.000	.0910	.1210	-.0820
225.000	-.0690	-.0770	-.0820
270.000	-.0850	-.0790	-.0830

MACH (3) = 3.502 BETAT (3) = -4.320

X/LNP	.250	.500	.750
PHI			
.000	-.0770	-.0830	
90.000	-.0860	-.0880	-.0840
135.000	.0300	-.0320	-.0820
180.000	.1170	.1480	-.0790
225.000	-.0600	-.0690	-.0780

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBND17)

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (3) = -4.320

X/LNP	.250	.500	.750
PHI			
270.000	-.0830	-.0680	-.0840

MACH (3) = 3.502 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.0740	-.0820	
90.000	-.0890	-.0830	-.0840
135.000	.0060	-.0470	-.0840
180.000	.1320	.1490	-.0700
225.000	-.0120	-.0540	-.0860
270.000	-.0860	-.0840	-.0810

MACH (3) = 3.502 BETAT (5) = 4.490

X/LNP	.250	.500	.750
PHI			
.000	-.0750	-.0810	
90.000	-.0870	-.0840	-.0830
135.000	-.0460	-.0610	-.0890
180.000	.1060	.1560	-.0730
225.000	-.0050	-.0620	-.0700
270.000	-.0840	-.0700	-.0810

MACH (3) = 3.502 BETAT (6) = 6.700

X/LNP	.250	.500	.750
PHI			
.000	-.0720	-.0790	
90.000	-.0830	-.0840	-.0800
135.000	-.0650	-.0700	-.0840
180.000	.0860	.1660	-.0860
225.000	-.0030	.0140	-.0860
270.000	-.0840	-.0810	-.0800

MACH (3) = 3.502 BETAT (7) = 8.910

X/LNP	.250	.500	.750
PHI			
.000	-.0790	-.0860	
90.000	-.0860	-.0880	-.0870
135.000	-.0800	-.0910	-.0860
180.000	.0890	.0860	-.0890
225.000	-.0060	.0510	-.0840
270.000	-.0930	-.0850	-.0860

AMES 87-707 IA9 OBA + S3 + T9 UPPER MPS NOZZLE (RBND18) (16 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	-4.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.420

X/LNP	.250	.500	.750
PHI			
.000	-.1360	-.1370	
90.000	-.1450	-.1380	-.1350
135.000	-.0690	-.0690	-.1370
180.000	.0470	-.0110	-.1460
225.000	-.1510	-.1460	-.1410
270.000	-.1390	-.1480	-.1390

MACH (1) = 2.498 BETAT (2) = -6.300

X/LNP	.250	.500	.750
PHI			
.000	-.1340	-.1370	
90.000	-.1400	-.1360	-.1330
135.000	-.0740	-.1180	-.1310
180.000	.0520	-.0010	-.1370
225.000	-.1370	-.1410	-.1360
270.000	-.1410	-.1410	-.1370

MACH (1) = 2.499 BETAT (3) = -4.180

X/LNP	.250	.500	.750
PHI			
.000	-.1360	-.1400	
90.000	-.1430	-.1410	-.1340
135.000	-.0880	-.1360	-.1350
180.000	.1340	.0140	-.1400
225.000	-.1390	-.1330	-.1370
270.000	-.1450	-.1350	-.1390

MACH (1) = 2.499 BETAT (4) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1310	-.1320	
90.000	-.1340	-.1300	-.1320
135.000	-.1450	-.1390	-.1310
180.000	.1970	.0860	-.1300
225.000	-.1480	-.1360	-.1310
270.000	-.1360	-.1370	-.1320

MACH (1) = 2.498 BETAT (5) = 4.310

X/LNP	.250	.500	.750
PHI			
.000	-.1340	-.1360	
90.000	-.1400	-.1380	-.1380
135.000	-.1510	-.1210	-.1370
180.000	.0980	-.0160	-.1350
225.000	-.1010	-.1290	-.1370

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND18)

SECTION (1)MP3 NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (5) = 4.310

X/LNP	.250	.500	.750
PHI			
270.000	-.1410	-.1310	-.1350

MACH (1) = 2.498 BETAT (6) = 5.430

X/LNP	.250	.500	.750
PHI			
.000	-.1340	-.1390	
90.000	-.1420	-.1380	-.1390
135.000	-.1470	-.1390	-.1390
180.000	.0830	.0030	-.1370
225.000	-.0920	-.1150	-.1460
270.000	-.1410	-.1410	-.1350

MACH (1) = 2.498 BETAT (7) = 8.560

X/LNP	.250	.500	.750
PHI			
.000	-.1360	-.1370	
90.000	-.1410	-.1390	-.1380
135.000	-.1560	-.1510	-.1390
180.000	.1230	.0860	-.1380
225.000	-.0790	-.1120	-.1460
270.000	-.1410	-.1370	-.1340

MACH (2) = 2.999 BETAT (1) = -8.580

X/LNP	.250	.500	.750
PHI			
.000	-.1030	-.1160	
90.000	-.1110	-.1090	-.1070
135.000	-.0360	-.0240	-.1080
180.000	.0660	.0380	-.1090
225.000	-.1140	-.1120	-.1150
270.000	-.1080	-.1130	-.1070

MACH (2) = 2.999 BETAT (2) = -4.260

X/LNP	.250	.500	.750
PHI			
.000	-.1080	-.1120	
90.000	-.1150	-.1150	-.1150
135.000	-.0270	-.0750	-.1080
180.000	.1320	.0380	-.1060
225.000	-.0930	-.1030	-.1160
270.000	-.1140	-.1120	-.1150

MACH (2) = 2.999 BETAT (3) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1050	-.1070	
90.000	-.1110	-.1090	-.1070
135.000	-.0420	-.1000	-.1090
180.000	.0910	.1020	-.1020
225.000	-.1040	-.1030	-.1130

AMES 87-707 IA9 CBA + S3 + T9 UPPER MPS NOZZLE (RBND18)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = .160

X/LNP	.250	.500	.750
PHI			
270.000	-.1080	-.1090	-.1070

MACH (2) = 2.999 BETAT (4) = 4.390

X/LNP	.250	.500	.750
PHI			
.000	-.1050	-.1070	
90.000	-.1120	-.1120	-.1090
135.000	-.0920	-.0690	-.1070
180.000	.1240	.0840	-.1080
225.000	-.0540	-.0610	-.1090
270.000	-.1070	-.1090	-.1070

MACH (2) = 2.999 BETAT (5) = 8.720

X/LNP	.250	.500	.750
PHI			
.000	-.1070	-.1090	
90.000	-.1080	-.1100	-.1080
135.000	-.1220	-.1140	-.1070
180.000	.1480	.1730	-.1180
225.000	-.0520	-.0380	-.1140
270.000	-.1140	-.1080	-.1080

MACH (3) = 3.502 BETAT (1) = -8.730

X/LNP	.250	.500	.750
PHI			
.000	-.0830	-.0920	
90.000	-.0930	-.0960	-.0930
135.000	-.0170	-.0010	-.0920
180.000	.0290	.0640	-.0890
225.000	-.0940	-.0900	-.0910
270.000	-.0930	-.0910	-.0880

MACH (3) = 3.502 BETAT (2) = -4.530

X/LNP	.250	.500	.750
PHI			
.000	-.0830	-.0910	
90.000	-.0940	-.0970	-.0860
135.000	-.0230	-.0010	-.0860
180.000	.0510	.0780	-.0880
225.000	-.0830	-.0860	-.0870
270.000	-.0920	-.0870	-.0900

MACH (3) = 3.502 BETAT (3) = -4.330

X/LNP	.250	.500	.750
PHI			
.000	-.0780	-.0880	
90.000	-.0890	-.0900	-.0850
135.000	-.0420	-.0260	-.0860
180.000	.0830	.1000	-.0850
225.000	-.0570	-.0590	-.0860

AMES 87-707 IA9 ORA + 53 + T9 UPPER MPS NOZZLE (FBNC18)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (3) = -4.33

PHI	X/LNP .25	.500	.750
27.000	-.1860	-.1850	-.1870

MACH (3) = 3.502 BETAT (4) = .66

PHI	X/LNP .25	.500	.750
.000	-.0780	-.1820	
90.000	-.1890	-.1850	-.1820
135.000	-.0160	-.1660	-.1840
180.000	.0740	.0720	-.0790
225.000	-.0150	-.1660	-.1900
270.000	-.1850	-.1650	-.1860

MACH (3) = 3.502 BETAT (5) = 4.47

PHI	X/LNP .25	.500	.750
.000	-.1810	-.1890	
90.000	-.0910	-.0910	-.1880
135.000	-.0540	-.0550	-.1880
180.000	.0750	.1250	-.1870
225.000	-.1240	-.0190	-.1920
270.000	-.1660	-.1870	-.1890

MACH (3) = 3.502 BETAT (6) 6.67

PHI	X/LNP .25	.500	.750
.000	-.1810	-.1890	
90.000	-.1910	-.1910	-.1880
135.000	-.1660	-.1850	-.1890
180.000	.0480	.1250	-.1890
225.000	-.1310	.0190	-.1870
270.000	-.1950	-.1910	-.1890

MACH (3) = 3.502 BETAT (7) = 8.87

PHI	X/LNP .25	.500	.750
.000	-.1810	-.1910	
90.000	-.1880	-.1890	-.1890
135.000	-.1910	-.1960	-.1890
180.000	.1420	.1450	-.1880
225.000	-.1290	.0180	-.1910
270.000	-.1930	-.1910	-.1910

AMES 87-797 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND19) (15 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.430

X/LNP	.250	.500	.750
PHI			
.000	-.1470	-.1480	
90.000	-.1490	-.1510	-.1510
135.000	-.1510	-.1370	-.1490
180.000	-.0180	.1010	-.1590
225.000	-.1590	-.1540	-.1510
270.000	-.1490	-.1560	-.1470

MACH (1) = 2.499 BETAT (2) = -6.310

X/LNP	.250	.500	.750
PHI			
.000	-.1450	-.1490	
90.000	-.1500	-.1480	-.1470
135.000	-.1090	-.1310	-.1470
180.000	.0130	-.0490	-.1500
225.000	-.1500	-.1540	-.1470
270.000	-.1530	-.1550	-.1450

MACH (1) = 2.499 BETAT (3) = -4.180

X/LNP	.250	.500	.750
PHI			
.000	-.1450	-.1480	
90.000	-.1480	-.1440	-.1480
135.000	-.1160	-.1360	-.1460
180.000	.0470	-.0300	-.1480
225.000	-.1550	-.1520	-.1480
270.000	-.1510	-.1550	-.1490

MACH (1) = 2.499 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1420	-.1420	
90.000	-.1450	-.1420	-.1430
135.000	-.1510	-.1500	-.1440
180.000	.1440	.0270	-.1430
225.000	-.1570	-.1460	-.1490
270.000	-.1460	-.1480	-.1410

MACH (1) = 2.499 BETAT (5) = 4.300

X/LNP	.250	.500	.750
PHI			
.000	-.1420	-.1470	
90.000	-.1500	-.1470	-.1480
135.000	-.1590	-.1440	-.1460
180.000	.0360	-.0170	-.1470
225.000	-.1280	-.1410	-.1490

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND19)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (5) = 4.300

X/LNP	.250	.500	.750
PHI			
270.000	-.1470	-.1430	-.1430

MACH (1) = 2.499 BETAT (6) = 6.430

X/LNP	.250	.500	.750
PHI			
.000	-.1410	-.1430	
90.000	-.1470	-.1460	-.1450
135.000	-.1480	-.1480	-.1450
180.000	.0360	-.0460	-.1420
225.000	-.1200	-.1460	-.1540
270.000	-.1460	-.1470	-.1450

MACH (1) = 2.498 BETAT (7) = 8.550

X/LNP	.250	.500	.750
PHI			
.000	-.1440	-.1460	
90.000	-.1470	-.1460	-.1480
135.000	-.1580	-.1560	-.1470
180.000	.0490	.0620	-.1480
225.000	-.1190	-.1320	-.1510
270.000	-.1470	-.1350	-.1450

MACH (2) = 2.999 BETAT (1) = -8.580

X/LNP	.250	.500	.750
PHI			
.000	-.1090	-.1120	
90.000	-.1120	-.1120	-.1120
135.000	-.0620	-.0600	-.1100
180.000	.0170	-.0050	-.1100
225.000	-.1160	-.1140	-.1120
270.000	-.1130	-.1140	-.1110

MACH (2) = 2.999 BETAT (2) = -4.260

X/LNP	.250	.500	.750
PHI			
.000	-.1070	-.1140	
90.000	-.1120	-.1120	-.1110
135.000	-.0640	-.0860	-.1100
180.000	.0870	-.0010	-.1110
225.000	-.1170	-.0900	-.1110
270.000	-.1140	-.1130	-.1100

MACH (2) = 2.999 BETAT (3) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1070	-.1100	
90.000	-.1120	-.1120	-.1100
135.000	-.0660	-.1120	-.1100
180.000	.0460	.0450	-.1090
225.000	-.0730	-.1080	-.1090

AMES 87-707 IA9 O2A + S3 + T9 UPPER MFS NOZZLE (RBND19)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = .060

X/LNP	.250	.500	.750
PHI			
270.000	-.1150	-.1070	-.1160

MACH (2) = 2.999 BETAT (4) = 4.380

X/LNP	.250	.500	.750
PHI			
.000	-.1110	-.1150	
90.000	-.1160	-.1160	-.1150
135.000	-.1110	-.0770	-.1140
180.000	.0730	-.0030	-.1140
225.000	-.0750	-.0840	-.1140
270.000	-.1140	-.1140	-.1120

MACH (2) = 2.999 BETAT (5) = 8.710

X/LNP	.250	.500	.750
PHI			
.000	-.1100	-.1140	
90.000	-.1130	-.1140	-.1140
135.000	-.1250	-.1190	-.1140
180.000	.0410	-.0860	-.1140
225.000	-.0730	-.0690	-.1140
270.000	-.1120	-.1070	-.1140

MACH (3) = 3.502 BETAT (1) = -8.745

X/LNP	.250	.500	.750
PHI			
.000	-.0850	-.0910	
90.000	-.0940	-.0920	-.0930
135.000	-.0390	-.0270	-.0940
180.000	.0010	.0000	-.0920
225.000	-.0940	-.0920	-.0930
270.000	-.0920	-.0920	-.0940

MACH (3) = 3.502 BETAT (2) = -6.540

X/LNP	.250	.500	.750
PHI			
.000	-.0820	-.0890	
90.000	-.0890	-.0890	-.0900
135.000	-.0420	-.0390	-.0890
180.000	.0270	.0030	-.0900
225.000	-.0860	-.0880	-.0890
270.000	-.0910	-.0880	-.0870

MACH (3) = 3.502 BETAT (3) = -4.340

X/LNP	.250	.500	.750
PHI			
.000	-.0830	-.0890	
90.000	-.0920	-.0900	-.0920
135.000	-.0440	-.0280	-.0920
180.000	.0780	.0320	-.0900
225.000	-.0880	-.0730	-.0920

AMES 87-757 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND19)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (3) = -4.340

X/LNP	.250	.500	.750
PHI			
270.000	-.0930	-.0900	-.0900

MACH (3) = 3.502 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.0780	-.0870	
90.000	-.0880	-.0880	-.0860
135.000	-.0350	-.0790	-.0890
180.000	.0420	.0420	-.0850
225.000	-.0340	-.0730	-.0830
270.000	-.0870	-.0770	-.0870

MACH (3) = 3.502 BETAT (5) = 4.460

X/LNP	.250	.500	.750
PHI			
.000	-.0850	-.0930	
90.000	-.0940	-.0940	-.0930
135.000	-.0770	-.0680	-.0940
180.000	.0670	.0740	-.0920
225.000	-.0500	-.0220	-.0910
270.000	-.0930	-.0910	-.0910

MACH (3) = 3.502 BETAT (6) = 6.660

X/LNP	.250	.500	.750
PHI			
.000	-.0830	-.0910	
90.000	-.0930	-.0930	-.0920
135.000	-.0910	-.0930	-.0940
180.000	.0190	.0570	-.0940
225.000	-.0510	-.0350	-.0920
270.000	-.0920	-.0850	-.0930

MACH (3) = 3.502 BETAT (7) = 8.860

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0950	
90.000	-.0950	-.0960	-.0950
135.000	-.0990	-.0960	-.0980
180.000	-.1030	.0600	-.0980
225.000	-.0530	-.0290	-.0990
270.000	-.0940	-.0930	-.0970

AMES 87-707 IA9 (02A + S3 + T9 UPPER MPS NOZZLE (RBND20) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	4.000	ORBINC =	.500
RUDDER =	-10.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.410

X/LNP	.250	.500	.750
PHI			
.000	-.1550	-.1570	
90.000	-.1590	-.1600	-.1570
135.000	-.1380	-.1460	-.1620
180.000	-.0580	-.0640	-.1660
225.000	-.1720	-.1600	-.1600
270.000	-.1590	-.1600	-.1600

MACH (1) = 2.499 BETAT (2) = -6.290

X/LNP	.250	.500	.750
PHI			
.000	-.1500	-.1530	
90.000	-.1540	-.1560	-.1530
135.000	-.1320	-.1460	-.1600
180.000	-.0290	-.0410	-.1540
225.000	-.1650	-.1610	-.1560
270.000	-.1550	-.1600	-.1540

MACH (1) = 2.499 BETAT (3) = -4.170

X/LNP	.250	.500	.750
PHI			
.000	-.1440	-.1470	
90.000	-.1480	-.1470	-.1480
135.000	-.1170	-.1430	-.1490
180.000	-.0030	-.0510	-.1480
225.000	-.1550	-.1550	-.1480
270.000	-.1490	-.1550	-.1470

MACH (1) = 2.499 BETAT (4) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1410	-.1440	
90.000	-.1480	-.1470	-.1450
135.000	-.1640	-.1470	-.1500
180.000	.0190	-.0220	-.1470
225.000	-.1610	-.1500	-.1460
270.000	-.1460	-.1500	-.1450

MACH (1) = 2.499 BETAT (5) = 4.310

X/LNP	.250	.500	.750
PHI			
.000	-.1460	-.1500	
90.000	-.1520	-.1490	-.1490
135.000	-.1600	-.1510	-.1500
180.000	.0000	-.0840	-.1500
225.000	-.1250	-.1520	-.1510

AMES 87-757 IA9 02A + S3 + T9 UPPER MFS NOZZLE (RBND29)

SECTION (1)MFS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (5) = 4.315

X/LNP	.250	.500	.750
PHI			
270.000	-.1530	-.1530	-.1500

MACH (1) = 2.499 BETAT (6) = 6.430

X/LNP	.250	.500	.750
PHI			
.000	-.1490	-.1530	
90.000	-.1570	-.1550	-.1520
135.000	-.1660	-.1580	-.1560
180.000	.0090	-.0520	-.1570
225.000	-.1460	-.1540	-.1560
270.000	-.1550	-.1530	-.1530

MACH (1) = 2.499 BETAT (7) = 9.560

X/LNP	.250	.500	.750
PHI			
.000	-.1540	-.1580	
90.000	-.1590	-.1580	-.1570
135.000	-.1690	-.1620	-.1570
180.000	-.0240	-.0320	-.1580
225.000	-.1390	-.1490	-.1650
270.000	-.1580	-.1500	-.1560

MACH (2) = 2.999 BETAT (1) = -8.575

X/LNP	.250	.500	.750
PHI			
.000	-.1160	-.1210	
90.000	-.1190	-.1200	-.1190
135.000	-.1050	-.1010	-.1220
180.000	-.0360	-.0470	-.1200
225.000	-.1260	-.1200	-.1220
270.000	-.1220	-.1200	-.1200

MACH (2) = 2.999 BETAT (2) = -4.250

X/LNP	.250	.500	.750
PHI			
.000	-.1140	-.1180	
90.000	-.1180	-.1190	-.1170
135.000	-.0830	-.1130	-.1190
180.000	.0210	-.0170	-.1180
225.000	-.1270	-.1070	-.1180
270.000	-.1190	-.1180	-.1170

MACH (2) = 2.999 BETAT (3) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1130	-.1130	
90.000	-.1150	-.1160	-.1130
135.000	-.1080	-.1170	-.1170
180.000	.0250	.0030	-.1170
225.000	-.1150	-.1120	-.1170

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND2U)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = .060

X/LNP	.250	.500	.750
PHI			
75.000	-.1150	-.1120	-.1140

MACH (2) = 2.999 BETAT (4) = 4.390

X/LNP	.250	.500	.750
PHI			
.000	-.1150	-.1200	
90.000	-.1190	-.1200	-.1180
135.000	-.1230	-.1010	-.1210
180.000	.0110	-.0440	-.1250
225.000	-.0960	-.1120	-.1200
270.000	-.1200	-.1190	-.1210

MACH (2) = 2.999 BETAT (5) = 8.720

X/LNP	.250	.500	.750
PHI			
.000	-.1175	-.1210	
90.000	-.1200	-.1240	-.1200
135.000	-.1280	-.1240	-.1210
180.000	-.0070	-.0250	-.1215
225.000	-.1060	-.1100	-.1200
270.000	-.1240	-.1140	-.1220

MACH (3) = 3.502 BETAT (1) = -8.720

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0970	
90.000	-.0830	-.0970	-.0970
135.000	-.0660	-.0630	-.0950
180.000	-.0150	-.0280	-.0980
225.000	-.0950	-.0950	-.0970
270.000	-.0960	-.0940	-.0960

MACH (3) = 3.502 BETAT (2) = -6.530

X/LNP	.250	.500	.750
PHI			
.000	-.0850	-.0940	
90.000	-.0940	-.0980	-.0940
135.000	-.0660	-.0610	-.0980
180.000	-.0180	-.0340	-.0920
225.000	-.0910	-.0910	-.0950
270.000	-.0960	-.0940	-.0940

MACH (3) = 3.502 BETAT (3) = -4.330

X/LNP	.250	.500	.750
PHI			
.000	-.0840	-.0930	
90.000	-.0910	-.0920	-.0930
135.000	-.0610	-.0780	-.0930
180.000	.0240	-.0110	-.0900
225.000	-.0950	-.0820	-.0960

AMES 87-707 IA9 O2A + S3 + T9 UPPER MPS NOZZLE (RBND2U)

SECTION (1)>MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (3) = -4.330

X/LNP	.250	.500	.750
PHI			
270.000	-.1050	-.0830	-.1030

MACH (3) = 3.502 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.0790	-.0910	
90.000	-.0870	-.0880	-.0910
135.000	-.0580	-.0870	-.0870
180.000	.0310	.0240	-.0870
225.000	-.0730	-.0840	-.0890
270.000	-.0890	-.0860	-.0910

MACH (3) = 3.502 BETAT (5) = 4.460

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0960	
90.000	-.0970	-.0960	-.0990
135.000	-.0840	-.0720	-.0990
180.000	.0240	-.0160	-.0910
225.000	-.0670	-.0780	-.0980
270.000	-.0960	-.0970	-.0980

MACH (3) = 3.502 BETAT (6) = 6.670

X/LNP	.250	.500	.750
PHI			
.000	-.0880	-.0960	
90.000	-.0970	-.0970	-.0940
135.000	-.0840	-.0990	-.0960
180.000	-.0480	-.0330	-.0980
225.000	-.0760	-.0730	-.0970
270.000	-.0930	-.0940	-.0940

MACH (3) = 3.502 BETAT (7) = 8.870

X/LNP	.250	.500	.750
PHI			
.000	-.0860	-.0960	
90.000	-.0950	-.0960	-.0960
135.000	-.1000	-.0970	-.0970
180.000	-.0130	-.0130	-.0980
225.000	-.0750	-.0760	-.0970
270.000	-.0950	-.0940	-.0960

AMES 87-757 IA9 02A + S3 + T9 UPPER MPS NOZZLE (RBND21) (15 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.380

X/LNP	.250	.500	.750
PHI			
.000	-.1590	-.1610	
90.000	-.1620	-.1660	-.1620
135.000	-.1490	-.1570	-.1670
180.000	-.0760	-.0620	-.1670
225.000	-.1750	-.1680	-.1650
270.000	-.1630	-.1680	-.1620

MACH (1) = 2.499 BETAT (2) = -6.280

X/LNP	.250	.500	.750
PHI			
.000	-.1560	-.1570	
90.000	-.1620	-.1610	-.1580
135.000	-.1470	-.1480	-.1660
180.000	-.0430	-.0580	-.1570
225.000	-.1670	-.1640	-.1610
270.000	-.1620	-.1690	-.1580

MACH (1) = 2.499 BETAT (3) = -4.170

X/LNP	.250	.500	.750
PHI			
.000	-.1520	-.1520	
90.000	-.1550	-.1530	-.1510
135.000	-.1310	-.1490	-.1570
180.000	-.0110	-.0390	-.1530
225.000	-.1610	-.1570	-.1560
270.000	-.1550	-.1570	-.1540

MACH (1) = 2.499 BETAT (4) = .080

X/LNP	.250	.500	.750
PHI			
.000	-.1470	-.1490	
90.000	-.1490	-.1490	-.1480
135.000	-.1660	-.1540	-.1520
180.000	.0070	-.0500	-.1510
225.000	-.1640	-.1530	-.1510
270.000	-.1490	-.1540	-.1460

MACH (1) = 2.499 BETAT (5) = 4.310

X/LNP	.250	.500	.750
PHI			
.000	-.1490	-.1530	
90.000	-.1540	-.1550	-.1530
135.000	-.1630	-.1530	-.1550
180.000	-.0010	-.0530	-.1520
225.000	-.1420	-.1550	-.1580

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBN021)

AMES 87-757 IA9 O2A + S3 + T9 UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (5) = 4.315

X/LNP	.250	.500	.750
PHI			
270.000	-.1560	-.1570	-.1510

MACH (1) = 2.498 BETAT (6) = 6.445

X/LNP	.250	.500	.750
PHI			
.000	-.1540	-.1590	
90.000	-.1600	-.1600	-.1580
135.000	-.1660	-.1620	-.1600
180.000	-.0150	-.0840	-.1630
225.000	-.1530	-.1600	-.1630
270.000	-.1620	-.1580	-.1570

MACH (1) = 2.499 BETAT (7) = 8.575

X/LNP	.250	.500	.750
PHI			
.000	-.1540	-.1580	
90.000	-.1600	-.1590	-.1600
135.000	-.1760	-.1650	-.1600
180.000	-.0270	-.0910	-.1650
225.000	-.1480	-.1560	-.1660
270.000	-.1570	-.1580	-.1580

MACH (2) = 2.999 BETAT (1) = -8.550

X/LNP	.250	.500	.750
PHI			
.000	-.1190	-.1240	
90.000	-.1220	-.1260	-.1230
135.000	-.1030	-.1070	-.1260
180.000	-.0500	-.0580	-.1220
225.000	-.1320	-.1270	-.1240
270.000	-.1230	-.1280	-.1250

MACH (2) = 2.999 BETAT (2) = -4.240

X/LNP	.250	.500	.750
PHI			
.000	-.1170	-.1260	
90.000	-.1260	-.1260	-.1260
135.000	-.0970	-.1110	-.1220
180.000	-.0070	-.0360	-.1220
225.000	-.1260	-.1110	-.1220
270.000	-.1210	-.1140	-.1180

MACH (2) = 2.999 BETAT (3) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.1110	-.1140	
90.000	-.1160	-.1160	-.1150
135.000	-.1240	-.1150	-.1180
180.000	.0120	-.0250	-.1160
225.000	-.1240	-.1140	-.1160

AMES 87-707 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND21)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = .060

X/LNP	.250	.500	.750
PHI			
270.000	-.1170	-.1160	-.1130

MACH (2) = 2.999 BETAT (4) = 4.400

X/LNP	.250	.500	.750
PHI			
.000	-.1140	-.1180	
90.000	-.1250	-.1250	-.1170
135.000	-.1210	-.1080	-.1200
180.000	-.0690	-.0500	-.1160
225.000	-.1020	-.1050	-.1220
270.000	-.1180	-.1180	-.1240

MACH (2) = 2.999 BETAT (5) = 8.730

X/LNP	.250	.500	.750
PHI			
.000	-.1180	-.1220	
90.000	-.1210	-.1260	-.1230
135.000	-.1270	-.1240	-.1210
180.000	-.0170	-.0770	-.1220
225.000	-.1110	-.1150	-.1240
270.000	-.1220	-.1190	-.1230

MACH (3) = 3.502 BETAT (1) = -8.710

X/LNP	.250	.500	.750
PHI			
.000	-.0890	-.0990	
90.000	-.0930	-.0950	-.0950
135.000	-.0740	-.0730	-.0950
180.000	-.0360	-.0460	-.0970
225.000	-.0950	-.0940	-.0960
270.000	-.0930	-.0930	-.0930

MACH (3) = 3.502 BETAT (2) = -6.510

X/LNP	.250	.500	.750
PHI			
.000	-.0830	-.0950	
90.000	-.0910	-.0920	-.0930
135.000	-.0750	-.0800	-.0940
180.000	-.0160	-.0240	-.0900
225.000	-.0940	-.0930	-.0930
270.000	-.0930	-.0920	-.0910

MACH (3) = 3.502 BETAT (3) = -4.320

X/LNP	.250	.500	.750
PHI			
.000	-.0830	-.0910	
90.000	-.0910	-.0920	-.0910
135.000	-.0690	-.0820	-.0920
180.000	-.0120	-.0160	-.0920
225.000	-.0920	-.0840	-.0940

AMES 87-707 IA9 02A + S3 + T9 UPPER MPS NOZZLE (RBND21)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (3) = -4.325

X/LNP	.250	.500	.750
PHI			
270.000	-.0940	-.0820	-.0920

MACH (3) = 3.502 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.0850	-.0930	
90.000	-.0940	-.0920	-.0930
135.000	-.0890	-.0940	-.0960
180.000	.0120	-.0130	-.0950
225.000	-.0960	-.0920	-.0970
270.000	-.0940	-.0910	-.0950

MACH (3) = 3.502 BETAT (5) = 4.470

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0960	
90.000	-.0980	-.0980	-.0940
135.000	-.0820	-.0680	-.0990
180.000	-.0240	-.0290	-.0910
225.000	-.0760	-.0850	-.0990
270.000	-.0940	-.0850	-.0960

MACH (3) = 3.502 BETAT (6) = 6.670

X/LNP	.250	.500	.750
PHI			
.000	-.0840	-.0950	
90.000	-.0950	-.0950	-.0950
135.000	-.0940	-.0890	-.0960
180.000	-.0190	-.0280	-.0930
225.000	-.0840	-.0890	-.0970
270.000	-.0940	-.0890	-.0950

MACH (3) = 3.502 BETAT (7) = 8.890

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0950	
90.000	-.0970	-.0970	-.0940
135.000	-.0980	-.0970	-.0960
180.000	-.0100	-.0600	-.0970
225.000	-.0840	-.0830	-.0980
270.000	-.0960	-.0820	-.0950

AMES 87-757 IA9 C2A + S3 + T9 UPPER MPS NOZZLE (RBND22) (15 MAY 73)

REFERENCE DATA

SREF = 2.421) SQ.FT. XMRP = 28.53)) INCHES
LREF = 39.849) INCHES YMRP = .))) INCHES
BREF = 39.849) INCHES ZMRP = .))) INCHES
SCALE = .1)) SCALE

PARAMETRIC DATA

ALPHAT = 8.))) ORBINC = .5))
RUDDER = -1)).))) ELEVON = .)))
RUDFLR = .)))

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.37)

X/LNP	.25)	.5))	.75)
PHI			
.)))	-.159)	-.163)	
9).)))	-.164)	-.165)	-.163)
135.)))	-.151)	-.155)	-.167)
18).)))	-.)75)	-.)91)	-.164)
225.)))	-.172)	-.17))	-.165)
27).)))	-.167)	-.17))	-.164)

MACH (1) = 2.499 BETAT (2) = -6.28)

X/LNP	.25)	.5))	.75)
PHI			
.)))	-.159)	-.159)	
9).)))	-.163)	-.163)	-.162)
135.)))	-.147)	-.152)	-.165)
18).)))	-.)49)	-.)69)	-.161)
225.)))	-.168)	-.165)	-.162)
27).)))	-.164)	-.165)	-.16))

MACH (1) = 2.499 BETAT (3) = -4.19)

X/LNP	.25)	.5))	.75)
PHI			
.)))	-.151)	-.156)	
9).)))	-.158)	-.156)	-.158)
135.)))	-.146)	-.156)	-.159)
18).)))	-.)22)	-.)39)	-.159)
225.)))	-.166)	-.159)	-.16))
27).)))	-.158)	-.162)	-.158)

MACH (1) = 2.499 BETAT (4) = .)6)

X/LNP	.25)	.5))	.75)
PHI			
.)))	-.151)	-.152)	
9).)))	-.153)	-.152)	-.152)
135.)))	-.159)	-.15))	-.156)
18).)))	.)))1)	-.)74)	-.154)
225.)))	-.165)	-.154)	-.152)
27).)))	-.153)	-.154)	-.15))

MACH (1) = 2.499 BETAT (5) = 4.33)

X/LNP	.25)	.5))	.75)
PHI			
.)))	-.149)	-.15))	
9).)))	-.151)	-.15))	-.153)
135.)))	-.161)	-.153)	-.253)
18).)))	-.)16)	-.)35)	-.155)
225.)))	-.154)	-.154)	-.14)

AMES 87-707 IA9 C02A + S3 + T9 UPPER MPS NOZZLE (RBND22)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (5) = 4.33

X/LNP	.25	.50	.75
PHI			
27.00	-.155	-.154	-.151

MACH (1) = 2.499 BETAT (6) = 5.46

X/LNP	.25	.50	.75
PHI			
.00	-.151	-.155	
9.00	-.156	-.158	-.158
135.00	-.156	-.158	-.158
18.00	-.044	-.079	-.162
225.00	-.153	-.151	-.163
27.00	-.156	-.154	-.159

MACH (1) = 2.499 BETAT (7) = 8.65

X/LNP	.25	.50	.75
PHI			
.00	-.156	-.161	
9.00	-.163	-.163	-.163
135.00	-.170	-.167	-.164
18.00	-.066	-.101	-.166
225.00	-.161	-.161	-.165
27.00	-.162	-.159	-.162

MACH (2) = 2.999 BETAT (1) = -8.53

X/LNP	.25	.50	.75
PHI			
.00	-.118	-.123	
9.00	-.121	-.123	-.125
135.00	-.121	-.109	-.125
18.00	-.067	-.071	-.123
225.00	-.122	-.126	-.124
27.00	-.124	-.126	-.126

MACH (2) = 2.999 BETAT (2) = -4.23

X/LNP	.25	.50	.75
PHI			
.00	-.114	-.117	
9.00	-.119	-.118	-.117
135.00	-.097	-.114	-.118
18.00	-.013	-.034	-.118
225.00	-.123	-.112	-.120
27.00	-.118	-.111	-.118

MACH (2) = 2.999 BETAT (3) = .08

X/LNP	.25	.50	.75
PHI			
.00	-.113	-.117	
9.00	-.117	-.116	-.116
135.00	-.126	-.113	-.117
18.00	-.002	-.043	-.117
225.00	-.124	-.115	-.117

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBND22)

AMES 87-707 IA9 02A + S3 + T9 UPPER MPS NOZZLE

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (3) = .060

X/LNP	.250	.500	.750
PHI			
270.000	-.1160	-.1150	-.1150

MACH (2) = 2.999 BETAT (4) = 4.450

X/LNP	.250	.500	.750
PHI			
.000	-.1150	-.1170	
90.000	-.1190	-.1200	-.1190
135.000	-.1230	-.1080	-.1210
180.000	-.1180	-.1240	-.1190
225.000	-.1190	-.1170	-.1210
270.000	-.1190	-.1190	-.1190

MACH (2) = 2.999 BETAT (5) = 8.750

X/LNP	.250	.500	.750
PHI			
.000	-.1190	-.1210	
90.000	-.1250	-.1230	-.1230
135.000	-.1260	-.1260	-.1240
180.000	-.1430	-.0850	-.1250
225.000	-.1210	-.1190	-.1270
270.000	-.1230	-.1190	-.1240

MACH (3) = 3.502 BETAT (1) = -8.680

X/LNP	.250	.500	.750
PHI			
.000	-.0960	-.1070	
90.000	-.0960	-.1070	-.0980
135.000	-.0840	-.0820	-.0980
180.000	-.0520	-.0500	-.0980
225.000	-.0990	-.0680	-.0990
270.000	-.0960	-.0990	-.0980

MACH (3) = 3.502 BETAT (2) = -6.490

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.1070	
90.000	-.0950	-.1070	-.0950
135.000	-.0860	-.0760	-.0970
180.000	-.0350	-.0420	-.0950
225.000	-.0950	-.0940	-.0950
270.000	-.0990	-.0940	-.0950

MACH (3) = 3.502 BETAT (3) = -4.310

X/LNP	.250	.500	.750
PHI			
.000	-.0960	-.0980	
90.000	-.0960	-.1070	-.0950
135.000	-.0970	-.0980	-.0960
180.000	-.0940	-.0960	-.0970
225.000	-.0950	-.0990	-.0960

AMES 87-757 IA9 OBA + S3 + T9 UPPER MPS NOZZLE (RBND22)

SECTION (1)MPS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (3) = -4.310

X/LNP	.250	.500	.750
PHI			
270.000	-.1070	-.0880	-.0980

MACH (3) = 3.502 BETAT (4) = .060

X/LNP	.250	.500	.750
PHI			
.000	-.0850	-.0920	
90.000	-.0930	-.0930	-.0920
135.000	-.1010	-.0910	-.0940
180.000	-.0030	-.0310	-.0910
225.000	-.0970	-.0910	-.0930
270.000	-.0930	-.0920	-.0930

MACH (3) = 3.502 BETAT (5) = 4.480

X/LNP	.250	.500	.750
PHI			
.000	-.0860	-.0970	
90.000	-.0950	-.0970	-.0970
135.000	-.0880	-.0770	-.0980
180.000	-.0180	-.0360	-.0960
225.000	-.0800	-.0910	-.0980
270.000	-.0930	-.0910	-.0970

MACH (3) = 3.502 BETAT (6) = 6.700

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0960	
90.000	-.0930	-.0960	-.0930
135.000	-.0900	-.0940	-.0950
180.000	-.0320	-.0520	-.0930
225.000	-.0880	-.0890	-.0950
270.000	-.0950	-.0900	-.0930

MACH (3) = 3.502 BETAT (7) = 8.910

X/LNP	.250	.500	.750
PHI			
.000	-.0870	-.0970	
90.000	-.0970	-.0970	-.0960
135.000	-.1000	-.0980	-.0990
180.000	-.0280	-.0480	-.1000
225.000	-.0900	-.0890	-.1000
270.000	-.0980	-.0880	-.0970

AMES 87-757 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE01) (21 MAY 73)

REFERENCE DATA

SREF =	2.421	SQ.FT.	XMRP =	28.53	INCHES
LREF =	39.849	INCHES	YMRP =	.000	INCHES
BREF =	39.849	INCHES	ZMRP =	.000	INCHES
SCALE =	.03	SCALE			

PARAMETRIC DATA

BETAT =	.00	ORBINC =	.5
RUDDER =	.00	ELEVON =	.0
RUDFLR =	.00		

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 ALPHAT(1) = -8.10

X/LNM	.25	.45
PHI		
135.00	.337	
180.00	.338	.575
225.00	.077	

MACH (1) = 2.498 ALPHAT(2) = -6.07

X/LNM	.25	.45
PHI		
135.00	.319	
180.00	.313	.521
225.00	.056	

MACH (1) = 2.498 ALPHAT(3) = -4.03

X/LNM	.25	.45
PHI		
135.00	.291	
180.00	.281	.427
225.00	.022	

MACH (1) = 2.498 ALPHAT(4) = -2.00

X/LNM	.25	.45
PHI		
135.00	.265	
180.00	.244	.332
225.00	-.012	

MACH (1) = 2.498 ALPHAT(5) = .00

X/LNM	.25	.45
PHI		
135.00	.265	
180.00	.246	.264
225.00	-.037	

MACH (1) = 2.498 ALPHAT(6) = 1.93

X/LNM	.25	.45
PHI		
135.00	.203	
180.00	.224	.259
225.00	-.052	

MACH (1) = 2.498 ALPHAT(7) = 3.97

X/LNM	.25	
PHI		
135.00	.1	
180.00	.2	
225.00	-.05	

AMES 97-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE:1)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 ALPHAT(8) = 5.95D

X/LNM	.2D	.4D
PHI		
135.0D	.127D	
180.0D	.152D	.261D
225.0D	-.057D	

MACH (1) = 2.498 ALPHAT(9) = 8.01D

X/LNM	.2D	.4D
PHI		
135.0D	.09 D	
180.0D	.075D	.198D
225.0D	-.06D	

MACH (2) = 2.999 ALPHAT(1) = -8.07D

X/LNM	.2D	.4D
PHI		
135.0D	.228D	
180.0D	.293D	.376D
225.0D	.057D	

MACH (2) = 2.999 ALPHAT(2) = -6.10D

X/LNM	.2D	.4D
PHI		
135.0D	.198D	
180.0D	.249D	.337D
225.0D	.036D	

MACH (2) = 2.999 ALPHAT(3) = -4.07D

X/LNM	.2D	.4D
PHI		
135.0D	.164D	
180.0D	.204D	.319D
225.0D	.024D	

MACH (2) = 2.999 ALPHAT(4) = -2.00D

X/LNM	.2D	.4D
PHI		
135.0D	.138D	
180.0D	.162D	.291D
225.0D	.011D	

MACH (2) = 2.999 ALPHAT(5) = -.01D

X/LNM	.2D	.4D
PHI		
135.0D	.133D	
180.0D	.156D	.268D
225.0D	-.003D	

MACH (2) = 2.999 ALPHAT(6) = 1.93D

X/LNM	.2D	.4D
PHI		
135.0D	.121D	
180.0D	.154D	.232D
225.0D	-.006D	

AMES 87-707 IA9 02A + S3 + T9 OMS NOZZLE (RBNE01)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 ALPHAT(7) = 3.960

X/LNM	.200	.400
PHI		
135.000	.1090	
180.000	.1190	.1870
225.000	-.0280	

MACH (2) = 2.999 ALPHAT(8) = 5.990

X/LNM	.200	.400
PHI		
135.000	.0660	
180.000	.1010	.1920
225.000	-.0470	

MACH (2) = 2.999 ALPHAT(9) = 8.000

X/LNM	.200	.400
PHI		
135.000	.0520	
180.000	.0640	.1090
225.000	-.0360	

MACH (3) = 3.502 ALPHAT(1) = -8.080

X/LNM	.200	.400
PHI		
135.000	.1870	
180.000	.2350	.2560
225.000	.0500	

MACH (3) = 3.502 ALPHAT(2) = -6.080

X/LNM	.200	.400
PHI		
135.000	.1490	
180.000	.1950	.2250
225.000	.0280	

MACH (3) = 3.502 ALPHAT(3) = -4.070

X/LNM	.200	.400
PHI		
135.000	.1220	
180.000	.1560	.2130
225.000	.0190	

MACH (3) = 3.502 ALPHAT(4) = -2.020

X/LNM	.200	.400
PHI		
135.000	.1020	
180.000	.1340	.2190
225.000	.0070	

MACH (3) = 3.502 ALPHAT(5) = -.030

X/LNM	.200	.400
PHI		
135.000	.0810	
180.000	.1150	.2150
225.000	.0000	

AMES 67-70 DAS CBA + 33 + 73 OMS NOZZLE (CBAE101)

SECTION 1 OMS NOZZLE DEPENDENT VARIABLE CD

MACH (3) = 3.962 ALPHA(6) = 5.95)

MACH	.2	.4
DM:		
135.000	.1423	
180.000	.1599	.2154
225.000	-.1148	

MACH (3) = 3.962 ALPHA(7) = 6.96)

MACH	.2	.4
DM:		
135.000	.1522	
180.000	.1771	.1661
225.000	-.1177	

MACH (3) = 3.962 ALPHA(8) = 5.97)

MACH	.2	.4
DM:		
135.000	.1633	
180.000	.1955	.1319
225.000	-.1265	

MACH (3) = 3.962 ALPHA(9) = 8.98)

MACH	.2	.4
DM:		
135.000	.1677	
180.000	.1922	.1159
225.000	-.1259	



DATE 19 SEP 73 TABULATED PRESSURE DATA - 19%

SWEEP 87-73.7 DEG FROM SEC 6, + 22 + 23 SEC WIDTH

REFERENCE DATA

SREF = 2.421 SQ.FT. LREF = 22.533 INCHES
BREF = 35.143 INCHES MRC = .000 INCHES
SREF = 35.143 INCHES ZMRC = .000 INCHES
SCALE = .39 SCALE

PARAMETRIC DATA

ALPHA = -3.00 MACH = .5%
XCG = .00 ELEVON = .0%
ZCG = .00

SECTION 1 INCH WIDTH

MACH 1) = 2.450 BETA 1) = -8.48

X/C	.25	.45
135.00	.456	
19.00	.327	.377
225.00	.215	

MACH 1) = 2.450 BETA 2) = -5.29

X/C	.25	.45
135.00	.427	
19.00	.412	.469
225.00	.269	

MACH 1) = 2.450 BETA 3) = -4.17

X/C	.25	.45
135.00	.432	
19.00	.435	.551
225.00	.301	

MACH 1) = 2.450 BETA 4) = -2.08

X/C	.25	.45
135.00	.427	
19.00	.375	.511
225.00	.284	

MACH 1) = 2.450 BETA 5 = 2.13

X/C	.25	.45
135.00	.273	
19.00	.377	.511
225.00	.321	

MACH 1) = 2.450 BETA 6, = 4.32

X/C	.25	.45
135.00	.0331	
19.00	.345	.335
225.00	.113	

MACH 1) = 2.450 BETA 7, = 6.46

X/C	.25	.45
135.00	.25	
19.00	.130	.215
225.00	-.19	

AMES H7-H17 !A9 C2A + S3 + T9 OMS NOZZLE (CONCLUDED)

SECTION 1 OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.49# BETAT (8) = 8.59

X/LNM	.2	.4
PHI		
135.00	.057	
180.00	.221	.113
225.00	-.116	

MACH (2) = 2.999 BETAT (1) = -8.58

X/LNM	.2	.4
PHI		
135.000	.320	
180.000	.240	.315
225.000	.120	

MACH (2) = 2.999 BETAT (2) = -6.48

X/LNM	.2	.4
PHI		
135.000	.321	
180.000	.266	.316
225.000	.120	

MACH (2) = 2.999 BETAT (3) = -4.25

X/LNM	.2	.4
PHI		
135.000	.281	
180.000	.298	.326
225.000	.092	

MACH (2) = 2.999 BETAT (4) = -2.15

X/LNM	.2	.4
PHI		
135.000	.235	
180.000	.315	.357
225.000	.063	

MACH (2) = 2.999 BETAT (5) = 2.23

X/LNM	.2	.4
PHI		
135.000	.259	
180.000	.231	.461
225.000	.081	

MACH (2) = 2.999 BETAT (6) = 4.45

X/LNM	.2	.4
PHI		
135.000	.203	
180.000	.272	.355
225.000	.072	

MACH (2) = 2.999 BETAT (7) = 6.53

X/LNM	.2	.4
PHI		
135.000	.167	
180.000	.233	.226
225.000	.044	

AMES 87-7.7 IA9 CEA + S3 + T9 OMS NOZZLE (RBNE:V2)

SECTION 1 1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (0) = 0.75)

X/LNM	.2))	.4))
PHI		
135.1))	.)34)	
18).1))	.175)	.139)
225.1))	-.)62)	

MACH (3) = 3.5)2 BETAT (1) = -0.71)

X/LNM	.2))	.4))
PHI		
135.1))	.229)	
18).1))	.192)	.378)
225.1))	.)78)	

MACH (3) = 3.5)2 BETAT (2) = -6.52)

X/LNM	.2))	.4))
PHI		
135.1))	.249)	
18).1))	.166)	.265)
225.1))	.)59)	

MACH (3) = 3.5)2 BETAT (3) = -4.33)

X/LNM	.2))	.4))
PHI		
135.1))	.267)	
18).1))	.2)1)	.257)
225.1))	.)69)	

MACH (3) = 3.5)2 BETAT (4) = -2.14)

X/LNM	.2))	.4))
PHI		
135.1))	.226)	
18).1))	.239)	.277)
225.1))	.)57)	

MACH (3) = 3.5)2 BETAT (5) = 2.28)

X/LNM	.2))	.4))
PHI		
135.1))	.154)	
18).1))	.2)9)	.279)
225.1))	.)58)	

MACH (3) = 3.5)2 BETAT (6) = 4.48)

X/LNM	.2))	.4))
PHI		
135.1))	.145)	
18).1))	.186)	.288)
225.1))	.)58)	

MACH (3) = 3.5)2 BETAT (7) = 6.69)

X/LNM	.2))	.4))
PHI		
135.1))	.)57)	
18).1))	.139)	.253)
225.1))	-.)4))	

AMES 87-707 IA9 CBA + S3 + T9 OMS NOZZLE (RBNEU2)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.912 BETAT (8) = 8.910

X/LNM	.200	.400
FHI		
135.000	.0640	
180.000	.0950	.2110
225.000	-.0420	

AMES 87-757 IA9 OBA + S3 + T9 OMS NOZZLE (RBNE03) (10 MAY 73)

REFERENCE DATA

SREF =	2.4215 SQ.FT.	XMRP =	28.5350	INCHES	
LREF =	39.8495 INCHES	YMRP =	.0000	INCHES	
BREF =	39.8495 INCHES	ZMRP =	.0000	INCHES	
SCALE =	.0350 SCALE				

PARAMETRIC DATA

ALPHAT =	-6.000	ORBINC =	.000
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.425

X/LNM	.200	.400
PHI		
135.000	.3540	
180.000	.2560	.3270
225.000	.1000	

MACH (1) = 2.498 BETAT (2) = -6.290

X/LNM	.200	.400
PHI		
135.000	.3950	
180.000	.3250	.4540
225.000	.0790	

MACH (1) = 2.498 BETAT (3) = -4.180

X/LNM	.200	.400
PHI		
135.000	.3850	
180.000	.3910	.5090
225.000	.0690	

MACH (1) = 2.498 BETAT (4) = -2.075

X/LNM	.200	.400
PHI		
135.000	.3780	
180.000	.3990	.5750
225.000	.0740	

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNM	.200	.400
PHI		
135.000	.2270	
180.000	.3550	.4110
225.000	.0390	

MACH (1) = 2.498 BETAT (6) = 4.310

X/LNM	.200	.400
PHI		
135.000	.1340	
180.000	.3370	.2540
225.000	.0240	

MACH (1) = 2.498 BETAT (7) = 6.440

X/LNM	.200	.400
PHI		
135.000	.0540	
180.000	.2970	.1420
225.000	-.0530	

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 02A + S3 + T9 CMS NOZZLE (RBNE03)

SECTION (1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (8) = 8.570

X/LNM	.200	.400
PHI		
135.000	.0515	
180.000	.1660	.0710
225.000	-.1270	

MACH (2) = 2.999 BETAT (1) = -8.570

X/LNM	.200	.400
PHI		
135.000	.2950	
180.000	.1990	.3610
225.000	.0990	

MACH (2) = 2.999 BETAT (2) = -6.420

X/LNM	.200	.400
PHI		
135.000	.2750	
180.000	.2140	.2730
225.000	.1570	

MACH (2) = 2.999 BETAT (3) = -4.280

X/LNM	.200	.400
PHI		
135.000	.2500	
180.000	.2450	.2880
225.000	.0810	

MACH (2) = 2.999 BETAT (4) = -2.100

X/LNM	.200	.400
PHI		
135.000	.2030	
180.000	.2730	.3280
225.000	.0490	

MACH (2) = 2.999 BETAT (5) = 2.220

X/LNM	.200	.400
PHI		
135.000	.1780	
180.000	.2480	.4150
225.000	.0660	

MACH (2) = 2.999 BETAT (6) = 4.390

X/LNM	.200	.400
PHI		
135.000	.1770	
180.000	.2470	.3120
225.000	.0660	

MACH (2) = 2.999 BETAT (7) = 8.560

X/LNM	.200	.400
PHI		
135.000	.0660	
180.000	.2230	.1510
225.000	-.0210	

AMES 87-757 IA9 OBA + S3 + T9 CMS NOZZLE (BBNE53)

SECTION (1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (8) = 9.73D

X/LNM	.2D	.4D
PHI		
135.0D	.03D	
180.0D	.144D	.078D
225.0D	-.00D	

MACH (3) = 3.5Q2 BETAT (1) = -8.73D

X/LNM	.2D	.4D
PHI		
135.0D	.234D	
180.0D	.171D	.367D
225.0D	.04D	

MACH (3) = 3.5Q2 BETAT (2) = -6.53D

X/LNM	.2D	.4D
PHI		
135.0D	.216D	
180.0D	.141D	.281D
225.0D	.04D	

MACH (3) = 3.5Q2 BETAT (3) = -4.34D

X/LNM	.2D	.4D
PHI		
135.0D	.241D	
180.0D	.151D	.219D
225.0D	.07D	

MACH (3) = 3.5Q2 BETAT (4) = -2.14D

X/LNM	.2D	.4D
PHI		
135.0D	.181D	
180.0D	.184D	.233D
225.0D	.03D	

MACH (3) = 3.5Q2 BETAT (5) = 2.26D

X/LNM	.2D	.4D
PHI		
135.0D	.135D	
180.0D	.189D	.264D
225.0D	.04D	

MACH (3) = 3.5Q2 BETAT (6) = 4.47D

X/LNM	.2D	.4D
PHI		
135.0D	.148D	
180.0D	.168D	.243D
225.0D	.03D	

MACH (3) = 3.5Q2 BETAT (7) = 8.68D

X/LNM	.2D	.4D
PHI		
135.0D	.04D	
180.0D	.125D	.168D
225.0D	-.01D	

AMES 87-707 IA9 02A + S3 + T9 OMS NOZZLE (SBNE03)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.962 BETAT (8) = 8.89

X/LNM	.25	.495
PHI		
135.000	.0535	
180.000	.0705	.1425
225.000	-.0555	

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RUN#64) (15 MAY 73)

AMES 87-757 IA9 CBA + S3 + T9 OMS NOZZLE

REFERENCE DATA

SREF =	2.4215	SQ.FT.	XMRP =	28.5360	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHAT =	-4.1000	CBINC =	.5000
RUDDER =	.0000	ELEVON =	.0000
RUDFLP =	.0000		

SECTION (1)OMS NOZZLE — DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

X/LNM	.200	.400
PHI		
135.0000	.2440	
180.0000	.1840	.3390
225.0000	.0730	

MACH (1) = 2.498 BETAT (2) = -6.315

X/LNM	.200	.400
PHI		
135.0000	.3550	
180.0000	.2360	.3450
225.0000	.0650	

MACH (1) = 2.498 BETAT (3) = -4.190

X/LNM	.200	.400
PHI		
135.0000	.3380	
180.0000	.3390	.4420
225.0000	.0570	

MACH (1) = 2.498 BETAT (4) = -2.075

X/LNM	.200	.400
PHI		
135.0000	.3280	
180.0000	.3220	.5410
225.0000	.0610	

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNM	.200	.400
PHI		
135.0000	.1810	
180.0000	.3220	.3270
225.0000	.0040	

MACH (1) = 2.498 BETAT (6) = 4.360

X/LNM	.200	.400
PHI		
135.0000	.0850	
180.0000	-.2950	.1540
225.0000	-.1070	

MACH (1) = 2.498 BETAT (7) = 6.430

X/LNM	.200	.400
PHI		
135.0000	.0150	
180.0000	-.2620	.0680
225.0000	-.1690	

AMES 87-757 IA9 C2A + S3 + T9 OMS NOZZLE (RBNEU4)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (8) = 8.550

X/LNM	.200	.400
PHI		
135.000	.1260	
180.000	.1340	.0140
225.000	-.1390	

MACH (2) = 2.999 BETAT (1) = -8.590

X/LNM	.200	.400
PHI		
135.000	.2430	
180.000	.1700	.3780
225.000	.1600	

MACH (2) = 2.999 BETAT (2) = -6.420

X/LNM	.200	.400
PHI		
135.000	.2380	
180.000	.1560	.2600
225.000	.0840	

MACH (2) = 2.999 BETAT (3) = -4.260

X/LNM	.200	.400
PHI		
135.000	.2110	
180.000	.1970	.2520
225.000	.0710	

MACH (2) = 2.999 BETAT (4) = -2.110

X/LNM	.200	.400
PHI		
135.000	.1760	
180.000	.2390	.3110
225.000	.1470	

MACH (2) = 2.999 BETAT (5) = 2.210

X/LNM	.200	.400
PHI		
135.000	.1540	
180.000	.2230	.3740
225.000	.1060	

MACH (2) = 2.999 BETAT (6) = 4.380

X/LNM	.200	.400
PHI		
135.000	.1470	
180.000	.2240	.2600
225.000	.1450	

MACH (2) = 2.999 BETAT (7) = 6.550

X/LNM	.200	.400
PHI		
135.000	.0500	
180.000	.2110	.0740
225.000	-.0500	

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNE04)

AMES 87-757 IA9 02A + S3 + T9 OMS NOZZLE

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (8) = 8.71D

X/LNM	.2D	.4D
PHI		
135.0D	.027D	
180.0D	.095D	-.008D
225.0D	-.103D	

MACH (3) = 3.502 BETAT (1) = -8.74D

X/LNM	.2D	.4D
PHI		
135.0D	.184D	
180.0D	.135D	.350D
225.0D	.052D	

MACH (3) = 3.502 BETAT (2) = -6.54D

X/LNM	.2D	.4D
PHI		
135.0D	.190D	
180.0D	.118D	.267D
225.0D	.057D	

MACH (3) = 3.502 BETAT (3) = -4.34D

X/LNM	.2D	.4D
PHI		
135.0D	.159D	
180.0D	.115D	.182D
225.0D	.064D	

MACH (3) = 3.502 BETAT (4) = -2.15D

X/LNM	.2D	.4D
PHI		
135.0D	.142D	
180.0D	.166D	.217D
225.0D	.064D	

MACH (3) = 3.502 BETAT (5) = 2.26D

X/LNM	.2D	.4D
PHI		
135.0D	.111D	
180.0D	.166D	.239D
225.0D	.036D	

MACH (3) = 3.502 BETAT (6) = 4.46D

X/LNM	.2D	.4D
PHI		
135.0D	.127D	
180.0D	.138D	.286D
225.0D	.012D	

MACH (3) = 3.502 BETAT (7) = 6.66D

X/LNM	.2D	.4D
PHI		
135.0D	.073D	
180.0D	.096D	.189D
225.0D	-.036D	

AMES 87-707 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE04)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.912 BETAT (2) = 4.870

X/LNM	.200	.400
PHI		
135.000	.0411	
180.000	.0470	.0440
225.000	-.0750	

AMES 87-707 IA9 02A + S3 + T9 OMS NOZZLE (RBNE05) (15 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -2.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

X/LNM	.200	.400
PHI		
135.000	.1920	
180.000	.1300	.3000
225.000	.0490	

MACH (1) = 2.498 BETAT (2) = -6.310

X/LNM	.200	.400
PHI		
135.000	.2600	
180.000	.1730	.3030
225.000	.0380	

MACH (1) = 2.498 BETAT (3) = -4.190

X/LNM	.200	.400
PHI		
135.000	.2940	
180.000	.2840	.4120
225.000	.0420	

MACH (1) = 2.498 BETAT (4) = -2.070

X/LNM	.200	.400
PHI		
135.000	.2880	
180.000	.2930	.4840
225.000	.0330	

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNM	.200	.400
PHI		
135.000	.1430	
180.000	.2840	.2280
225.000	-.0260	

MACH (1) = 2.498 BETAT (6) = 4.350

X/LNM	.200	.400
PHI		
135.000	.0530	
180.000	.2630	.0660
225.000	-.0420	

MACH (1) = 2.498 BETAT (7) = 6.420

X/LNM	.200	.400
PHI		
135.000	-.0220	
180.000	.2390	-.0260
225.000	-.0840	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE05)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (8) = 8.545

X/LNM	.200	.400
PHI		
135.000	-.0200	
180.000	.1030	-.0550
225.000	-.1430	

MACH (2) = 2.999 BETAT (1) = -8.595

X/LNM	.200	.400
PHI		
135.000	.1930	
180.000	.1510	.2900
225.000	.0630	

MACH (2) = 2.999 BETAT (2) = -6.445

X/LNM	.200	.400
PHI		
135.000	.2070	
180.000	.1160	.2750
225.000	.0590	

MACH (2) = 2.999 BETAT (3) = -4.270

X/LNM	.200	.400
PHI		
135.000	.1770	
180.000	.1370	.2470
225.000	.0600	

MACH (2) = 2.999 BETAT (4) = -2.110

X/LNM	.200	.400
PHI		
135.000	.1390	
180.000	.1900	.2840
225.000	.0450	

MACH (2) = 2.999 BETAT (5) = 2.220

X/LNM	.200	.400
PHI		
135.000	.1240	
180.000	.2030	.3240
225.000	.0530	

MACH (2) = 2.999 BETAT (6) = 4.370

X/LNM	.200	.400
PHI		
135.000	.1290	
180.000	.2130	.1710
225.000	.0200	

MACH (2) = 2.999 BETAT (7) = 6.530

X/LNM	.200	.400
PHI		
135.000	.0380	
180.000	.1980	.0180
225.000	-.0780	

AMES 87-707 IA9 02A + S3 + T9 OMS NOZZLE (RBNE05)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (8) = 8.71D

X/LNM	.2D	.4D
PHI		
135.0D	.045D	
180.0D	.032D	-.049D
225.0D	-.112D	

MACH (3) = 3.502 BETAT (1) = -8.75D

X/LNM	.2D	.4D
PHI		
135.0D	.175D	
180.0D	.107D	.309D
225.0D	.083D	

MACH (3) = 3.502 BETAT (2) = -6.54D

X/LNM	.2D	.4D
PHI		
135.0D	.146D	
180.0D	.078D	.254D
225.0D	.043D	

MACH (3) = 3.502 BETAT (3) = -4.35D

X/LNM	.2D	.4D
PHI		
135.0D	.107D	
180.0D	.067D	.172D
225.0D	.047D	

MACH (3) = 3.502 BETAT (4) = -2.14D

X/LNM	.2D	.4D
PHI		
135.0D	.084D	
180.0D	.130D	.185D
225.0D	.039D	

MACH (3) = 3.502 BETAT (5) = 2.26D

X/LNM	.2D	.4D
PHI		
135.0D	.085D	
180.0D	.139D	.224D
225.0D	.029D	

MACH (3) = 3.502 BETAT (6) = 4.46D

X/LNM	.2D	.4D
PHI		
135.0D	.119D	
180.0D	.121D	.252D
225.0D	.001D	

MACH (3) = 3.502 BETAT (7) = 6.66D

X/LNM	.2D	.4D
PHI		
135.0D	.085D	
180.0D	.084D	.162D
225.0D	-.047D	

AMES 87-757 IA3 02A + 53 + T9 OMS NOZZLE (SBNE:5)

SECTION (2)OMS NOZZLE DEFENS AT VARIABLE CP

MACH (3) = 3.502 BETAT (8) = 0.860

X/L=	.20	.40
PHI		
135.00	.0145	
180.00	.0079	-.0548
225.00	-.0187	

AMES 87-757 IA9 OBA + S3 + T9 OMS NOZZLE (RBNE06) (15 MAY 73)

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5360	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHAT =	.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

X/LNM	.200	.400
PHI		
135.000	.1350	
180.000	.0800	.1690
225.000	.0650	

MACH (1) = 2.498 BETAT (2) = -6.315

X/LNM	.200	.400
PHI		
135.000	.1650	
180.000	.1140	.3130
225.000	.0820	

MACH (1) = 2.498 BETAT (3) = -4.190

X/LNM	.200	.400
PHI		
135.000	.2620	
180.000	.1910	.3820
225.000	.0170	

MACH (1) = 2.498 BETAT (4) = -2.070

X/LNM	.200	.400
PHI		
135.000	.2470	
180.000	.2430	.4050
225.000	.0060	

MACH (1) = 2.498 BETAT (5) = 2.170

X/LNM	.200	.400
PHI		
135.000	.1210	
180.000	.2310	.1520
225.000	-.0530	

MACH (1) = 2.498 BETAT (6) = 4.290

X/LNM	.200	.400
PHI		
135.000	.0330	
180.000	.2260	.0030
225.000	-.0620	

MACH (1) = 2.498 BETAT (7) = 6.415

X/LNM	.200	.400
PHI		
135.000	-.0460	
180.000	.1730	-.0670
225.000	-.1260	

AMES 87-757 IA9 CBA + S3 + T9 OMS NOZZLE (RBNEU6)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (8) = 8.545

X/LNM	.200	.400
PHI		
135.000	.0010	
180.000	.0490	-.0870
225.000	-.1530	

MACH (2) = 2.999 BETAT (1) = -8.590

X/LNM	.200	.400
PHI		
135.000	.1610	
180.000	.1310	.0820
225.000	.0690	

MACH (2) = 2.999 BETAT (2) = -8.430

X/LNM	.200	.400
PHI		
135.000	.1610	
180.000	.0950	.1540
225.000	.0550	

MACH (2) = 2.999 BETAT (3) = -4.270

X/LNM	.200	.400
PHI		
135.000	.1570	
180.000	.0930	.2580
225.000	.0360	

MACH (2) = 2.999 BETAT (4) = -2.110

X/LNM	.200	.400
PHI		
135.000	.1170	
180.000	.1590	.2760
225.000	.0320	

MACH (2) = 2.999 BETAT (5) = 2.210

X/LNM	.200	.400
PHI		
135.000	.0960	
180.000	.1650	.2520
225.000	.0300	

MACH (2) = 2.999 BETAT (6) = 4.370

X/LNM	.200	.400
PHI		
135.000	.1010	
180.000	.1910	.0840
225.000	-.0010	

MACH (2) = 2.999 BETAT (7) = 8.530

X/LNM	.200	.400
PHI		
135.000	.0290	
180.000	.1760	-.0250
225.000	-.0680	

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AMES 87-707 IA9 OBA + S3 + T9 OMS NOZZLE

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (8) = 8.690

X/LNM	.200	.400
PHI		
135.000	.0530	
180.000	.0050	-.0860
225.000	-.1150	

MACH (3) = 3.502 BETAT (1) = -8.750

X/LNM	.200	.400
PHI		
135.000	.1550	
180.000	.1010	.2190
225.000	.0390	

MACH (3) = 3.502 BETAT (2) = -6.550

X/LNM	.200	.400
PHI		
135.000	.1130	
180.000	.0900	.0340
225.000	.0760	

MACH (3) = 3.502 BETAT (3) = -4.340

X/LNM	.200	.400
PHI		
135.000	.0750	
180.000	.0350	.1800
225.000	.0190	

MACH (3) = 3.502 BETAT (4) = -2.150

X/LNM	.200	.400
PHI		
135.000	.0540	
180.000	.0860	.1480
225.000	.0180	

MACH (3) = 3.502 BETAT (5) = 2.260

X/LNM	.200	.400
PHI		
135.000	.0550	
180.000	.0990	.1690
225.000	.0480	

MACH (3) = 3.502 BETAT (6) = 4.450

X/LNM	.200	.400
PHI		
135.000	.1070	
180.000	.1250	.1810
225.000	.0800	

MACH (3) = 3.502 BETAT (7) = 6.650

X/LNM	.200	.400
PHI		
135.000	.0620	
180.000	.0630	.1110
225.000	-.0630	

AMES 87-707 IA9 C2A + S3 + T9 OMS NOZZLE (RBNED6)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (8) = 8.850

X/LNM	.200	.400
PHI		
135.000	.0130	
180.000	-.0230	-.0790
225.000	-.0860	

AMES 87-7x7 IA9 CBA + S3 + T9 CMS NOZZLE (BBNE37) (15 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.939 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .039 SCALE

PARAMETRIC DATA

ALPHAT = 2.00 ORBINC = .5
RUDDER = .00 ELEVON = .1
RUDFLP = .00

SECTION (1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.43

PHI	X/LBM .2	.4
135.00	.082	
180.00	.022	-.039
225.00	.094	

MACH (1) = 2.498 BETAT (2) = -6.31

PHI	X/LBM .2	.4
135.00	.099	
180.00	.040	.240
225.00	.059	

MACH (1) = 2.498 BETAT (3) = -4.19

PHI	X/LBM .2	.4
135.00	.108	
180.00	.122	.357
225.00	-.009	

MACH (1) = 2.498 BETAT (4) = -2.06

PHI	X/LBM .2	.4
135.00	.259	
180.00	.173	.339
225.00	-.026	

MACH (1) = 2.498 BETAT (5) = 2.17

PHI	X/LBM .2	.4
135.00	.133	
180.00	.198	.129
225.00	-.078	

MACH (1) = 2.498 BETAT (6) = 4.29

PHI	X/LBM .2	.4
135.00	.099	
180.00	.241	-.012
225.00	-.083	

MACH (1) = 2.498 BETAT (7) = 6.41

PHI	X/LBM .2	.4
135.00	-.027	
180.00	.177	-.081
225.00	-.119	

AMES 87-757 IA9 O2A + S3 + T9 OMS NOZZLE (RENE'87)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (0) = 0.545

PHI	X/LNM .200	.400
135.000	.0390	
180.000	.0360	-.1120
225.000	-.1540	

MACH (2) = 2.999 BETAT (1) = -0.595

PHI	X/LNM .200	.400
135.000	.0980	
180.000	.1390	.0790
225.000	.0740	

MACH (2) = 2.999 BETAT (2) = -0.425

PHI	X/LNM .200	.400
135.000	.1030	
180.000	.0460	.0020
225.000	.0770	

MACH (2) = 2.999 BETAT (3) = -0.270

PHI	X/LNM .200	.400
135.000	.1510	
180.000	.0550	.2410
225.000	.0120	

MACH (2) = 2.999 BETAT (4) = -2.110

PHI	X/LNM .200	.400
135.000	.1090	
180.000	.1160	.2470
225.000	-.0020	

MACH (2) = 2.999 BETAT (5) = 2.210

PHI	X/LNM .200	.400
135.000	.0560	
180.000	.1570	.1850
225.000	-.0120	

MACH (2) = 2.999 BETAT (6) = 4.370

PHI	X/LNM .200	.400
135.000	.0880	
180.000	.1620	.0920
225.000	-.0240	

MACH (2) = 2.999 BETAT (7) = 6.530

PHI	X/LNM .200	.400
135.000	.0380	
180.000	.1210	-.0440
225.000	-.0950	

AMES 87-707 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE07)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (8) = 8.690

X/LNM	.250	.450
PHI		
135.000	.0740	
180.000	-.0070	-.0960
225.000	-.1150	

MACH (3) = 3.502 BETAT (1) = -8.730

X/LNM	.200	.400
PHI		
135.000	.1020	
180.000	.1220	.1260
225.000	-.0220	

MACH (3) = 3.502 BETAT (2) = -6.540

X/LNM	.250	.400
PHI		
135.000	.1460	
180.000	.0730	-.0300
225.000	.0150	

MACH (3) = 3.502 BETAT (3) = -4.340

X/LNM	.250	.400
PHI		
135.000	.0550	
180.000	.0270	.0990
225.000	.0080	

MACH (3) = 3.502 BETAT (4) = -2.140

X/LNM	.200	.400
PHI		
135.000	.0380	
180.000	.0650	.1370
225.000	.0030	

MACH (3) = 3.502 BETAT (5) = 2.250

X/LNM	.200	.400
PHI		
135.000	.1250	
180.000	.0650	.1370
225.000	-.0170	

MACH (3) = 3.502 BETAT (6) = 4.480

X/LNM	.250	.400
PHI		
135.000	.0990	
180.000	.1060	.1250
225.000	-.0020	

MACH (3) = 3.502 BETAT (7) = 8.680

X/LNM	.250	.400
PHI		
135.000	.0870	
180.000	.0820	-.0210
225.000	-.0850	

AMES 87-757 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE07)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (8) = 8.850

X/LNM	.200	.400
PHI		
135.000	-.0170	
180.000	-.0660	-.0990
225.000	-.0950	

AMES 87-7:7 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE::8) (1: MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8495 INCHES YMRP = .0000 INCHES
BREF = 39.8495 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.425

X/LNM	.200	.400
PHI		
135.000	-.0250	
180.000	.0060	-.0670
225.000	.1130	

MACH (1) = 2.498 BETAT (2) = -6.300

X/LNM	.200	.400
PHI		
135.000	.0740	
180.000	-.0230	.0750
225.000	.0560	

MACH (1) = 2.498 BETAT (3) = -4.190

X/LNM	.200	.400
PHI		
135.000	.0910	
180.000	.0740	.2720
225.000	-.0130	

MACH (1) = 2.498 BETAT (4) = -2.070

X/LNM	.200	.400
PHI		
135.000	.1710	
180.000	.1490	.2320
225.000	-.0550	

MACH (1) = 2.498 BETAT (5) = 2.170

X/LNM	.200	.400
PHI		
135.000	.1460	
180.000	.1740	.1050
225.000	-.0890	

MACH (1) = 2.498 BETAT (6) = 4.300

X/LNM	.200	.400
PHI		
135.000	.0750	
180.000	.1710	-.0150
225.000	-.0860	

MACH (1) = 2.498 BETAT (7) = 8.420

X/LNM	.200	.400
PHI		
135.000	.0590	
180.000	.1410	-.0870
225.000	-.1390	

AVES 87-707 IA9 02A + S3 + T9 OMS NOZZLE (RBNE08)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (8) = [illegible]

X/LNM	.200	.400
PHI		
135.000	.0580	
180.000	-.0480	-.1440
225.000	-.1490	

MACH (2) = 2.999 BETAT (1) = -8.590

X/LNM	.200	.400
PHI		
135.000	.0360	
180.000	.1010	.0450
225.000	.0260	

MACH (2) = 2.999 BETAT (2) = -6.420

X/LNM	.200	.400
PHI		
135.000	.0270	
180.000	.0360	-.0280
225.000	.0150	

MACH (2) = 2.999 BETAT (3) = -4.260

X/LNM	.200	.400
PHI		
135.000	.1120	
180.000	.0270	.1240
225.000	.0470	

MACH (2) = 2.999 BETAT (4) = -2.100

X/LNM	.200	.400
PHI		
135.000	.0930	
180.000	.0940	.1740
225.000	-.0340	

MACH (2) = 2.999 BETAT (5) = 2.210

X/LNM	.200	.400
PHI		
135.000	.0350	
180.000	.0870	.1190
225.000	-.0290	

MACH (2) = 2.999 BETAT (6) = 4.370

X/LNM	.200	.400
PHI		
135.000	.0400	
180.000	.1320	.1180
225.000	-.0420	

MACH (2) = 2.999 BETAT (7) = 6.540

X/LNM	.200	.400
PHI		
135.000	.0360	
180.000	.1420	.0230
225.000	-.0720	

AMES 87-757 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE08)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (8) = 8.700

X/LNM	.200	.400
PHI		
135.000	.0560	
180.000	-.0340	-.1130
225.000	-.1050	

MACH (3) = 3.502 BETAT (1) = -8.720

X/LNM	.200	.400
PHI		
135.000	.0370	
180.000	.0700	.0740
225.000	-.0630	

MACH (3) = 3.502 BETAT (2) = -6.530

X/LNM	.200	.400
PHI		
135.000	.0200	
180.000	.0470	-.0070
225.000	-.0480	

MACH (3) = 3.502 BETAT (3) = -4.330

X/LNM	.200	.400
PHI		
135.000	.0590	
180.000	.0220	-.0350
225.000	-.0420	

MACH (3) = 3.502 BETAT (4) = -2.140

X/LNM	.200	.400
PHI		
135.000	.0210	
180.000	.0570	.1190
225.000	-.0210	

MACH (3) = 3.502 BETAT (5) = 2.260

X/LNM	.200	.400
PHI		
135.000	.0110	
180.000	.0410	.1040
225.000	-.0180	

MACH (3) = 3.502 BETAT (6) = 4.460

X/LNM	.200	.400
PHI		
135.000	.0280	
180.000	.0910	.1050
225.000	-.0270	

MACH (3) = 3.502 BETAT (7) = 6.660

X/LNM	.200	.400
PHI		
135.000	.0130	
180.000	.0820	-.0100
225.000	-.0630	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE08)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (8) = 8.860

X/LNM	.200	.400
PHI		
135.000	-.0380	
180.000	-.0870	-.0960
225.000	-.0980	

AMES 87-707 IA9 OBA + S3 + T9 OMS NOZZLE (RBNE09) (10 MAY 73)

REFERENCE DATA

SREF =	2.4219 SQ.FT.	XMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

PARAMETRIC DATA

ALPHAT =	6.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.410

X/LNM	.200	.400
PHI		
135.000	-.0690	
180.000	-.0900	-.1340
225.000	.0030	

MACH (1) = 2.498 BETAT (2) = -6.290

X/LNM	.200	.400
PHI		
135.000	.0060	
180.000	-.0290	-.0370
225.000	.0190	

MACH (1) = 2.498 BETAT (3) = -4.170

X/LNM	.200	.400
PHI		
135.000	.0530	
180.000	.0160	.2420
225.000	-.0230	

MACH (1) = 2.498 BETAT (4) = -2.060

X/LNM	.200	.400
PHI		
135.000	.0960	
180.000	.1420	.1740
225.000	-.0660	

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNM	.200	.400
PHI		
135.000	.1610	
180.000	.1510	.1370
225.000	-.0910	

MACH (1) = 2.498 BETAT (6) = 4.300

X/LNM	.200	.400
PHI		
135.000	.0980	
180.000	.1510	.0190
225.000	-.0920	

MACH (1) = 2.498 BETAT (7) = 6.440

X/LNM	.200	.400
PHI		
135.000	.1470	
180.000	.1210	-.0680
225.000	-.1420	

AMES 87-707 IA9 C2A + S3 + T9 CMS NOZZLE (RBNE09)

SECTION (1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (8) = 8.570

X/LNM	.200	.400
PHI		
135.000	.1230	
180.000	-.0215	-.1570
225.000	-.1500	

MACH (2) = 2.999 BETAT (1) = -8.560

X/LNM	.200	.400
PHI		
135.000	-.0070	
180.000	.0460	.0320
225.000	-.0530	

MACH (2) = 2.999 BETAT (2) = -6.400

X/LNM	.200	.400
PHI		
135.000	-.0230	
180.000	.0290	-.0150
225.000	-.0600	

MACH (2) = 2.999 BETAT (3) = -4.250

X/LNM	.200	.400
PHI		
135.000	-.0280	
180.000	.0030	-.0070
225.000	-.0110	

MACH (2) = 2.999 BETAT (4) = -2.100

X/LNM	.200	.400
PHI		
135.000	.0750	
180.000	.1000	.1440
225.000	-.0410	

MACH (2) = 2.999 BETAT (5) = 2.210

X/LNM	.200	.400
PHI		
135.000	.0560	
180.000	.0740	.0580
225.000	-.0540	

MACH (2) = 2.999 BETAT (6) = 4.380

X/LNM	.200	.400
PHI		
135.000	-.0030	
180.000	.1120	.0820
225.000	-.0490	

MACH (2) = 2.999 BETAT (7) = 6.550

X/LNM	.200	.400
PHI		
135.000	-.0280	
180.000	.1650	-.0670
225.000	-.0580	

AMES 87-707 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE09)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (8) = 8.720

X/LNM	.200	.400
PHI		
135.000	-.0010	
180.000	-.0410	-.0940
225.000	-.1130	

MACH (3) = 3.502 BETAT (1) = -8.710

X/LNM	.200	.400
PHI		
135.000	.0040	
180.000	-.0190	.0190
225.000	-.0870	

MACH (3) = 3.502 BETAT (2) = -6.510

X/LNM	.200	.400
PHI		
135.000	-.0360	
180.000	.0230	.0140
225.000	-.0810	

MACH (3) = 3.502 BETAT (3) = -4.320

X/LNM	.200	.400
PHI		
135.000	-.0330	
180.000	-.0210	-.0610
225.000	-.0530	

MACH (3) = 3.502 BETAT (4) = -2.130

X/LNM	.200	.400
PHI		
135.000	.0060	
180.000	.0410	.0550
225.000	-.0380	

MACH (3) = 3.502 BETAT (5) = 2.260

X/LNM	.200	.400
PHI		
135.000	.0150	
180.000	.0830	.0770
225.000	-.0250	

MACH (3) = 3.502 BETAT (6) = 4.470

X/LNM	.200	.400
PHI		
135.000	-.0140	
180.000	.0780	.0070
225.000	-.0430	

MACH (3) = 3.502 BETAT (7) = 6.670

X/LNM	.200	.400
PHI		
135.000	-.0020	
180.000	.0670	-.0570
225.000	-.0490	

AMES 87-707 IA9 02A + S3 + T9 OMS NOZZLE (R9NE09)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (8) = 8.880

X/LNM	.200	.400
PHI		
135.000	-.0440	
180.000	-.0940	-.1030
225.000	-.1030	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE10) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	8.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.380

X/LNM	.200	.400
PHI		
135.000	-.1040	
180.000	-.1150	-.1500
225.000	-.1000	

MACH (1) = 2.498 BETAT (2) = -6.270

X/LNM	.200	.400
PHI		
135.000	-.0310	
180.000	-.0800	-.1290
225.000	-.0500	

MACH (1) = 2.498 BETAT (3) = -4.170

X/LNM	.200	.400
PHI		
135.000	.0030	
180.000	-.0190	.0670
225.000	-.0340	

MACH (1) = 2.498 BETAT (4) = -2.080

X/LNM	.200	.400
PHI		
135.000	.0350	
180.000	.1630	.2000
225.000	-.0870	

MACH (1) = 2.498 BETAT (5) = 2.180

X/LNM	.200	.400
PHI		
135.000	.1890	
180.000	.1590	.1500
225.000	-.0880	

MACH (1) = 2.498 BETAT (6) = 4.320

X/LNM	.200	.400
PHI		
135.000	.1070	
180.000	.1330	.0530
225.000	-.0920	

MACH (1) = 2.498 BETAT (7) = 6.450

X/LNM	.200	.400
PHI		
135.000	.1170	
180.000	.1470	-.0310
225.000	-.1230	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE10)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (8) = 8.585

X/LNM	.200	.400
PHI		
135.000	.0380	
180.000	-.0160	-.1380
225.000	-.1420	

MACH (2) = 2.999 BETAT (1) = -8.540

X/LNM	.200	.400
PHI		
135.000	-.0430	
180.000	-.0130	-.0930
225.000	-.1060	

MACH (2) = 2.999 BETAT (2) = -6.390

X/LNM	.200	.400
PHI		
135.000	-.0690	
180.000	-.0310	-.0540
225.000	-.0940	

MACH (2) = 2.999 BETAT (3) = -4.240

X/LNM	.200	.400
PHI		
135.000	-.0750	
180.000	.0090	-.0490
225.000	-.0450	

MACH (2) = 2.999 BETAT (4) = -2.090

X/LNM	.200	.400
PHI		
135.000	.0280	
180.000	.0840	.0050
225.000	-.0560	

MACH (2) = 2.999 BETAT (5) = 2.230

X/LNM	.200	.400
PHI		
135.000	.1380	
180.000	.0730	.0620
225.000	-.0680	

MACH (2) = 2.999 BETAT (6) = 4.400

X/LNM	.200	.400
PHI		
135.000	.0140	
180.000	.0930	-.1430
225.000	-.0570	

MACH (2) = 2.999 BETAT (7) = 6.570

X/LNM	.200	.400
PHI		
135.000	-.0620	
180.000	.0190	-.1070
225.000	-.0700	

AMES 87-7G7 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE1D)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (8) = 8.740

X/LNM	.200	.400
PHI		
135.000	-.0730	
180.000	-.0840	-.0970
225.000	-.1090	

MACH (3) = 3.502 BETAT (1) = -8.690

X/LNM	.200	.400
PHI		
135.000	.0170	
180.000	-.0370	.0140
225.000	-.0950	

MACH (3) = 3.502 BETAT (2) = -6.500

X/LNM	.200	.400
PHI		
135.000	-.0190	
180.000	-.0400	-.0050
225.000	-.0940	

MACH (3) = 3.502 BETAT (3) = -4.310

X/LNM	.200	.400
PHI		
135.000	-.0530	
180.000	.0090	-.0490
225.000	-.0800	

MACH (3) = 3.502 BETAT (4) = -2.130

X/LNM	.200	.400
PHI		
135.000	-.0080	
180.000	.0410	.0040
225.000	-.0450	

MACH (3) = 3.502 BETAT (5) = 2.260

X/LNM	.200	.400
PHI		
135.000	.0430	
180.000	.0350	.0420
225.000	-.0360	

MACH (3) = 3.502 BETAT (6) = 4.480

X/LNM	.200	.400
PHI		
135.000	-.0320	
180.000	.0400	-.0410
225.000	-.0470	

MACH (3) = 3.502 BETAT (7) = 6.690

X/LNM	.200	.400
PHI		
135.000	-.0720	
180.000	-.0200	-.0830
225.000	-.0520	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE1D)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (8) = 8.900

X/LNM	.200	.400
PHI		
135.000	-.0770	
180.000	-.0745	-.0745
225.000	-.1020	

AMES 87-767 IA9 C2A + S3 + T9 CMS NOZZLE (RBNE11) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.390

X/LNM	.200	.400
PHI		
135.000	.4630	
180.000	.3330	.3820
225.000	.1090	

MACH (1) = 2.498 BETAT (2) = -6.270

X/LNM	.200	.400
PHI		
135.000	.4290	
180.000	.4160	.4710
225.000	.0880	

MACH (1) = 2.498 BETAT (3) = -4.160

X/LNM	.200	.400
PHI		
135.000	.4320	
180.000	.4380	.5570
225.000	.0850	

MACH (1) = 2.498 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.3450	
180.000	.3420	.5800
225.000	.0820	

MACH (1) = 2.498 BETAT (5) = 4.330

X/LNM	.200	.400
PHI		
135.000	.2320	
180.000	.3490	.3910
225.000	.0490	

MACH (1) = 2.498 BETAT (6) = 6.460

X/LNM	.200	.400
PHI		
135.000	.1010	
180.000	.3320	.2290
225.000	-.0300	

MACH (1) = 2.498 BETAT (7) = 8.600

X/LNM	.200	.400
PHI		
135.000	.0680	
180.000	.2240	.1210
225.000	-.0970	

AMES 87-707 IA9 O2A + S3 + T9 CMS NOZZLE (RBNE11)

SECTION (1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.560

X/LNM	.200	.400
PHI		
135.000	.3270	
180.000	.2410	.3200
225.000	.1240	

MACH (2) = 2.999 BETAT (2) = -6.410

X/LNM	.200	.400
PHI		
135.000	.3250	
180.000	.2660	.3080
225.000	.1240	

MACH (2) = 2.999 BETAT (3) = -4.260

X/LNM	.200	.400
PHI		
135.000	.2850	
180.000	.3000	.3350
225.000	.0960	

MACH (2) = 2.999 BETAT (4) = .050

X/LNM	.200	.400
PHI		
135.000	.2300	
180.000	.2950	.3820
225.000	.0570	

MACH (2) = 2.999 BETAT (5) = 4.400

X/LNM	.200	.400
PHI		
135.000	.2080	
180.000	.2810	.3520
225.000	.0790	

MACH (2) = 2.999 BETAT (6) = 6.580

X/LNM	.200	.400
PHI		
135.000	.0730	
180.000	.2400	.2420
225.000	.0000	

MACH (2) = 2.999 BETAT (7) = 8.750

X/LNM	.200	.400
PHI		
135.000	.0400	
180.000	.1680	.1500
225.000	-.0620	

MACH (3) = 3.502 BETAT (1) = -8.710

X/LNM	.200	.400
PHI		
135.000	.2420	
180.000	.2100	.4060
225.000	.0900	

AMES 87-707 IA9 OBA + S3 + T9 OMS NOZZLE (RBNE11)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.520

X/LNM	.200	.400
PHI		
135.000	.2570	
180.000	.1730	.2720
225.000	.1120	

MACH (3) = 3.502 BETAT (3) = -4.330

X/LNM	.200	.400
PHI		
135.000	.2780	
180.000	.2070	.2640
225.000	.0960	

MACH (3) = 3.502 BETAT (4) = .050

X/LNM	.200	.400
PHI		
135.000	.1810	
180.000	.2290	.2530
225.000	.0470	

MACH (3) = 3.502 BETAT (5) = 4.470

X/LNM	.200	.400
PHI		
135.000	.1470	
180.000	.1910	.2770
225.000	.0620	

MACH (3) = 3.502 BETAT (6) = 6.690

X/LNM	.200	.400
PHI		
135.000	.0660	
180.000	.1380	.2730
225.000	-.0060	

MACH (3) = 3.502 BETAT (7) = 8.900

X/LNM	.200	.400
PHI		
135.000	.0680	
180.000	.0950	.2190
225.000	-.0370	

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE12) (18 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	-4.000	ORBINC =	.000
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LNM	.200	.400
PHI		
135.000	.2520	
180.000	.1950	.3390
225.000	.0830	

MACH (1) = 2.498 BETAT (2) = -6.300

X/LNM	.200	.400
PHI		
135.000	.3630	
180.000	.2450	.3480
225.000	.0690	

MACH (1) = 2.498 BETAT (3) = -4.180

X/LNM	.200	.400
PHI		
135.000	.3430	
180.000	.3450	.4450
225.000	.0640	

MACH (1) = 2.498 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.3040	
180.000	.2880	.4440
225.000	.0340	

MACH (1) = 2.498 BETAT (5) = 4.310

X/LNM	.200	.400
PHI		
135.000	.1900	
180.000	.3020	.1630
225.000	-.0620	

MACH (1) = 2.498 BETAT (6) = 6.430

X/LNM	.200	.400
PHI		
135.000	.0200	
180.000	.2680	.0680
225.000	-.0620	

MACH (1) = 2.498 BETAT (7) = 8.560

X/LNM	.200	.400
PHI		
135.000	.0320	
180.000	.1380	.0140
225.000	-.1350	

AMES 87-707 IA9 02A + S3 + T9 OMS NOZZLE (RBNE12)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.390

X/LNM	.200	.400
PHI		
135.000	.2470	
180.000	.1720	.3810
225.000	.0590	

MACH (2) = 2.999 BETAT (2) = -6.430

X/LNM	.200	.400
PHI		
135.000	.2390	
180.000	.1550	.2610
225.000	.0800	

MACH (2) = 2.999 BETAT (3) = -4.270

X/LNM	.200	.400
PHI		
135.000	.2120	
180.000	.1960	.2560
225.000	.0710	

MACH (2) = 2.999 BETAT (4) = .050

X/LNM	.200	.400
PHI		
135.000	.1710	
180.000	.2100	.3310
225.000	.0310	

MACH (2) = 2.999 BETAT (5) = 4.380

X/LNM	.200	.400
PHI		
135.000	.1540	
180.000	.2290	.2810
225.000	.0480	

MACH (2) = 2.999 BETAT (6) = 6.550

X/LNM	.200	.400
PHI		
135.000	.0560	
180.000	.2110	.0850
225.000	-.0500	

MACH (2) = 2.999 BETAT (7) = 8.710

X/LNM	.200	.400
PHI		
135.000	.0400	
180.000	.0930	.0670
225.000	-.1010	

MACH (3) = 3.502 BETAT (1) = -8.740

X/LNM	.200	.400
PHI		
135.000	.1910	
180.000	.1490	.3640
225.000	.0630	

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 OBA + S3 + T9 OMS NOZZLE (RBNE12)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.540

X/LNM	.200	.400
PHI		
135.000	.1930	
180.000	.1110	.2770
225.000	.0600	

MACH (3) = 3.502 BETAT (3) = -4.350

X/LNM	.200	.400
PHI		
135.000	.1630	
180.000	.1150	.1870
225.000	.0670	

MACH (3) = 3.502 BETAT (4) = .050

X/LNM	.200	.400
PHI		
135.000	.1370	
180.000	.1700	.2230
225.000	.0200	

MACH (3) = 3.502 BETAT (5) = 4.460

X/LNM	.200	.400
PHI		
135.000	.1340	
180.000	.1420	.2860
225.000	.0140	

MACH (3) = 3.502 BETAT (6) = 6.660

X/LNM	.200	.400
PHI		
135.000	.0790	
180.000	.0980	.1940
225.000	-.0350	

MACH (3) = 3.502 BETAT (7) = 8.860

X/LNM	.200	.400
PHI		
135.000	.0410	
180.000	.0480	.0380
225.000	-.0770	

AMES 87-757 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE13) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LNM	.200	.400
PHI		
135.000	.1390	
180.000	.0680	.1790
225.000	.0720	

MACH (1) = 2.498 BETAT (2) = -6.300

X/LNM	.200	.400
PHI		
135.000	.1730	
180.000	.1210	.3080
225.000	.0810	

MACH (1) = 2.498 BETAT (3) = -4.180

X/LNM	.200	.400
PHI		
135.000	.2720	
180.000	.2140	.3730
225.000	.0270	

MACH (1) = 2.498 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.2740	
180.000	.2320	.2890
225.000	-.0210	

MACH (1) = 2.498 BETAT (5) = 4.300

X/LNM	.200	.400
PHI		
135.000	.0340	
180.000	.2310	.0080
225.000	-.0570	

MACH (1) = 2.498 BETAT (6) = 6.420

X/LNM	.200	.400
PHI		
135.000	-.0390	
180.000	.1790	-.0580
225.000	-.1150	

MACH (1) = 2.498 BETAT (7) = 8.540

X/LNM	.200	.400
PHI		
135.000	.0020	
180.000	.0510	-.0790
225.000	-.1490	

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RUN#13)

AMES 67-757 IA9 CBA + S3 + T9 OMS NOZZLE

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.580

X/LNM	.200	.400
PHI		
135.000	.1660	
180.000	.1380	.0870
225.000	.0920	

MACH (2) = 2.999 BETAT (2) = -6.420

X/LNM	.200	.400
PHI		
135.000	.1680	
180.000	.1510	.1590
225.000	.0590	

MACH (2) = 2.999 BETAT (3) = -4.280

X/LNM	.200	.400
PHI		
135.000	.1640	
180.000	.1980	.2870
225.000	.0420	

MACH (2) = 2.999 BETAT (4) = .080

X/LNM	.200	.400
PHI		
135.000	.1330	
180.000	.1540	.2880
225.000	.0040	

MACH (2) = 2.999 BETAT (5) = 4.360

X/LNM	.200	.400
PHI		
135.000	.1080	
180.000	.1980	.0800
225.000	.0490	

MACH (2) = 2.999 BETAT (6) = 8.540

X/LNM	.200	.400
PHI		
135.000	.0400	
180.000	.1760	-.0170
225.000	-.0780	

MACH (2) = 2.999 BETAT (7) = 8.690

X/LNM	.200	.400
PHI		
135.000	.0840	
180.000	.0100	-.0770
225.000	-.1070	

MACH (3) = 3.502 BETAT (1) = -8.750

X/LNM	.200	.400
PHI		
135.000	.1640	
180.000	.1020	.2120
225.000	.0450	

AMES 87-707 IA9 C2A + S3 + T9 CMS NOZZLE (RBNE13)

SECTION (1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.550

X/LNM	.200	.400
PHI		
135.000	.1150	
180.000	.0950	.0320
225.000	.0630	

MACH (3) = 3.502 BETAT (3) = -4.350

X/LNM	.200	.400
PHI		
135.000	.0790	
180.000	.0400	.1890
225.000	.0250	

MACH (3) = 3.502 BETAT (4) = .050

X/LNM	.200	.400
PHI		
135.000	.0890	
180.000	.1230	.2230
225.000	.0050	

MACH (3) = 3.502 BETAT (5) = 4.450

X/LNM	.200	.400
PHI		
135.000	.1150	
180.000	.1340	.1850
225.000	.0060	

MACH (3) = 3.502 BETAT (6) = 6.650

X/LNM	.200	.400
PHI		
[illegible].000	.0760	
[illegible].000	.0780	.0920
225.000	-.0640	

MACH (3) = 3.502 BETAT (7) = 8.840

X/LNM	.200	.400
PHI		
135.000	.0180	
180.000	-.0160	-.0710
225.000	-.0650	

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNE14) (10 MAY 73)

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE

REFERENCE DATA

SREF =	2.4219 SQ.FT.	XMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

PARAMETRIC DATA

ALPHAT =	4.000	ORBINC =	.000
RUDDER =	-15.000	ELEVON =	.000
RUDFLT =	.000		

SECTION (1)OMS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.410

X/LNM	.200	.400
PHI		
135.000	-.0200	
180.000	.0140	-.0610
225.000	.1220	

MACH (1) = 2.498 BETAT (2) = -6.290

X/LNM	.200	.400
PHI		
135.000	.0890	
180.000	-.0150	.1010
225.000	.0650	

MACH (1) = 2.498 BETAT (3) = -4.180

X/LNM	.200	.400
PHI		
135.000	.1020	
180.000	.0790	.2870
225.000	-.0020	

MACH (1) = 2.498 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.1630	
180.000	.1620	.2790
225.000	-.0470	

MACH (1) = 2.498 BETAT (5) = 4.310

X/LNM	.200	.400
PHI		
135.000	.0750	
180.000	.1660	-.0100
225.000	-.0850	

MACH (1) = 2.498 BETAT (6) = 6.430

X/LNM	.200	.400
PHI		
135.000	.0560	
180.000	.1460	-.0800
225.000	-.1290	

MACH (1) = 2.498 BETAT (7) = 8.560

X/LNM	.200	.400
PHI		
135.000	.0580	
180.000	.0040	-.1380
225.000	-.1470	

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNE14)

AMES 87-707 IA9 C2A + S3 + T9 CMS NOZZLE

SECTION (1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.560

X/LNM	.200	.400
PHI		
135.000	.0430	
180.000	.1090	.0640
225.000	.0330	

MACH (2) = 2.999 BETAT (2) = -6.410

X/LNM	.200	.400
PHI		
135.000	.0400	
180.000	.0540	-.0100
225.000	.0170	

MACH (2) = 2.999 BETAT (3) = -4.250

X/LNM	.200	.400
PHI		
135.000	.0900	
180.000	.0270	.1130
225.000	.0100	

MACH (2) = 2.999 BETAT (4) = .080

X/LNM	.200	.400
PHI		
135.000	.1130	
180.000	.1250	.1830
225.000	-.0240	

MACH (2) = 2.999 BETAT (5) = 4.380

X/LNM	.200	.400
PHI		
135.000	.0350	
180.000	.1360	.1240
225.000	-.0410	

MACH (2) = 2.999 BETAT (6) = 6.550

X/LNM	.200	.400
PHI		
135.000	.0580	
180.000	.1530	.0060
225.000	-.0650	

MACH (2) = 2.999 BETAT (7) = 8.710

X/LNM	.200	.400
PHI		
135.000	.0520	
180.000	-.0420	-.1060
225.000	-.1010	

MACH (3) = 3.502 BETAT (1) = -8.730

X/LNM	.200	.400
PHI		
135.000	.0430	
180.000	.0740	.0810
225.000	-.0580	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBI..14)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.530

X/LNM	.200	.400
PHI		
135.000	.0200	
180.000	.0450	-.0070
225.000	-.0500	

MACH (3) = 3.502 BETAT (3) = -4.340

X/LNM	.200	.400
PHI		
135.000	.0580	
180.000	.0230	-.0380
225.000	-.0040	

MACH (3) = 3.502 BETAT (4) = .050

X/LNM	.200	.400
PHI		
135.000	.0350	
180.000	.0830	.1780
225.000	-.0010	

MACH (3) = 3.502 BETAT (5) = 4.450

X/LNM	.200	.400
PHI		
135.000	.0320	
180.000	.1020	.1050
225.000	-.0220	

MACH (3) = 3.502 BETAT (6) = 6.660

X/LNM	.200	.400
PHI		
135.000	.0210	
180.000	.0860	-.0050
225.000	-.0570	

MACH (3) = 3.502 BETAT (7) = 8.880

X/LNM	.200	.400
PHI		
135.000	-.0420	
180.000	-.0830	-.0940
225.000	-.0950	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE15) (15 MAY 73)

REFERENCE DATA

SREF =	2.4219 SQ.FT.	XMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0350 SCALE		

PARAMETRIC DATA

ALPHAT =	6.000	ORBINC =	.000
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.390

X/LNM	.200	.400
PHI		
135.000	-.0570	
180.000	-.0810	-.1270
225.000	.0130	

MACH (1) = 2.498 BETAT (2) = -6.280

X/LNM	.200	.400
PHI		
135.000	.0230	
180.000	-.0260	-.0270
225.000	.0310	

MACH (1) = 2.498 BETAT (3) = -4.180

X/LNM	.200	.400
PHI		
135.000	.0590	
180.000	.0220	.2570
225.000	-.0160	

MACH (1) = 2.498 BETAT (4) = .080

X/LNM	.200	.400
PHI		
135.000	.1330	
180.000	.1110	.2720
225.000	-.0460	

MACH (1) = 2.498 BETAT (5) = 4.310

X/LNM	.200	.400
PHI		
135.000	.0960	
180.000	.1520	.0180
225.000	-.0890	

MACH (1) = 2.498 BETAT (6) = 6.440

X/LNM	.200	.400
PHI		
135.000	.1400	
180.000	.1240	-.0650
225.000	-.1360	

MACH (1) = 2.498 BETAT (7) = 8.570

X/LNM	.200	.400
PHI		
135.000	.1360	
180.000	-.0160	-.1470
225.000	-.1420	

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNE15)

AMES 87-707 IA9 C2A + S3 + T9 CMS NOZZLE

DEPENDENT VARIABLE CP

SECTION (1)CMS NOZZLE

MACH (2) = 2.999 BETAT (1) = -8.550

X/LNM	.200	.400
PHI		
135.000	.0030	
180.000	.0560	.0300
225.000	-.0440	

MACH (2) = 2.999 BETAT (2) = -6.400

X/LNM	.200	.400
PHI		
135.000	-.0150	
180.000	.0330	-.0140
225.000	-.0510	

MACH (2) = 2.999 BETAT (3) = -4.240

X/LNM	.200	.400
PHI		
135.000	-.0280	
180.000	.0060	.0010
225.000	-.0100	

MACH (2) = 2.999 BETAT (4) = .080

X/LNM	.200	.400
PHI		
135.000	.0730	
180.000	.1110	.1850
225.000	-.0420	

MACH (2) = 2.999 BETAT (5) = 4.390

X/LNM	.200	.400
PHI		
135.000	-.0050	
180.000	.1230	.0640
225.000	-.0450	

MACH (2) = 2.999 BETAT (6) = 8.570

X/LNM	.200	.400
PHI		
135.000	-.0270	
180.000	.1700	-.0680
225.000	-.0500	

MACH (2) = 2.999 BETAT (7) = 8.730

X/LNM	.200	.400
PHI		
135.000	.0060	
180.000	-.0460	-.0850
225.000	-.1110	

MACH (3) = 3.502 BETAT (1) = -8.710

X/LNM	.200	.400
PHI		
135.000	.0130	
180.000	-.0160	.0280
225.000	-.0810	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE15)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.520

PHI	X/LNM .200	.400
135.000	-.0330	
180.000	.0260	.0190
225.000	-.0780	

MACH (3) = 3.502 BETAT (3) = -4.330

PHI	X/LNM .200	.400
135.000	-.0300	
180.000	-.0200	-.0600
225.000	-.0520	

MACH (3) = 3.502 BETAT (4) = .050

PHI	X/LNM .200	.400
135.000	.0080	
180.000	.0560	.1190
225.000	-.0190	

MACH (3) = 3.502 BETAT (5) = 4.480

PHI	X/LNM .200	.400
135.000	-.0120	
180.000	.0820	.0100
225.000	-.0380	

MACH (3) = 3.502 BETAT (6) = 6.660

PHI	X/LNM .200	.400
135.000	.0060	
180.000	.0760	-.0470
225.000	-.0400	

MACH (3) = 3.502 BETAT (7) = 8.880

PHI	X/LNM .200	.400
135.000	-.0440	
180.000	-.0900	-.0960
225.000	-.0970	

AMES 87-707 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE16) (15 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300	INCHES	
LREF =	39.8490 INCHES	YMRP =	.0000	INCHES	
BREF =	39.8490 INCHES	ZMRP =	.0000	INCHES	
SCALE =	.0350 SCALE				

PARAMETRIC DATA

ALPHAT =	8.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS NOZZLE

DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.370

X/LNM	.200	.400
PHI		
135.000	-.0950	
180.000	-.1150	-.1460
225.000	-.0950	

MACH (1) = 2.498 BETAT (2) = -6.270

X/LNM	.200	.400
PHI		
135.000	-.0200	
180.000	-.0710	-.1220
225.000	-.0400	

MACH (1) = 2.498 BETAT (3) = -4.160

X/LNM	.200	.400
PHI		
135.000	.0110	
180.000	-.0160	.0850
225.000	-.0240	

MACH (1) = 2.498 BETAT (4) = .080

X/LNM	.200	.400
PHI		
135.000	.0960	
180.000	.0840	.2160
225.000	-.0510	

MACH (1) = 2.498 BETAT (5) = 4.330

X/LNM	.200	.400
PHI		
135.000	.1120	
180.000	.1360	.0580
225.000	-.0860	

MACH (1) = 2.498 BETAT (6) = 6.460

X/LNM	.200	.400
PHI		
135.000	.1220	
180.000	.1540	-.0320
225.000	-.1170	

MACH (1) = 2.498 BETAT (7) = 8.600

X/LNM	.200	.400
PHI		
135.000	.0490	
180.000	-.0100	-.1300
225.000	-.1340	

AMES 87-707 IA9 C0A + S3 + T9 OMS NOZZLE (RBNE16)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.530

X/LNM	.200	.400
PHI		
135.000	-.0400	
180.000	-.0090	-.0880
225.000	-.1000	

MACH (2) = 2.999 BETAT (2) = -6.380

X/LNM	.200	.400
PHI		
135.000	-.0660	
180.000	-.0270	-.0480
225.000	-.0930	

MACH (2) = 2.999 BETAT (3) = -4.230

X/LNM	.200	.400
PHI		
135.000	-.0680	
180.000	.0180	-.0410
225.000	-.0420	

MACH (2) = 2.999 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.0600	
180.000	.0750	.1990
225.000	-.0320	

MACH (2) = 2.999 BETAT (5) = 4.400

X/LNM	.200	.400
PHI		
135.000	.0190	
180.000	.1010	.0010
225.000	-.0500	

MACH (2) = 2.999 BETAT (6) = 6.580

X/LNM	.200	.400
PHI		
135.000	-.0540	
180.000	.0210	-.0940
225.000	-.0590	

MACH (2) = 2.999 BETAT (7) = 8.750

X/LNM	.200	.400
PHI		
135.000	-.0650	
180.000	-.0750	-.0870
225.000	-.1030	

MACH (3) = 3.502 BETAT (1) = -8.690

X/LNM	.200	.400
PHI		
135.000	.0190	
180.000	-.0340	.0170
225.000	-.0920	

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNE16)

AMES 87-707 IA9 C2A + S3 + T9 CMS NOZZLE

SECTION (1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.500

X/LNM	.200	.400
PHI		
135.000	-.0170	
180.000	-.0410	-.0040
225.000	-.0960	

MACH (3) = 3.502 BETAT (3) = -4.320

X/LNM	.200	.400
PHI		
135.000	-.0510	
180.000	.0090	-.0470
225.000	-.0780	

MACH (3) = 3.502 BETAT (4) = .050

X/LNM	.200	.400
PHI		
135.000	.0260	
180.000	.0460	.1190
225.000	-.0220	

MACH (3) = 3.502 BETAT (5) = 4.470

X/LNM	.200	.400
PHI		
135.000	-.0370	
180.000	.0370	-.0430
225.000	-.0450	

MACH (3) = 3.502 BETAT (6) = 6.680

X/LNM	.200	.400
PHI		
135.000	-.0700	
180.000	-.0190	-.0830
225.000	-.0510	

MACH (3) = 3.502 BETAT (7) = 8.900

X/LNM	.200	.400
PHI		
135.000	-.0730	
180.000	-.0740	-.0710
225.000	-.1010	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE17) (15 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5500 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.390

X/LNM	.200	.400
PHI		
135.000	.4450	
180.000	.3160	.3680
225.000	.1110	

MACH (1) = 2.499 BETAT (2) = -6.280

X/LNM	.200	.400
PHI		
135.000	.4260	
180.000	.3980	.4520
225.000	.0910	

MACH (1) = 2.498 BETAT (3) = -4.160

X/LNM	.200	.400
PHI		
135.000	.4190	
180.000	.4350	.5370
225.000	.0840	

MACH (1) = 2.498 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.3370	
180.000	.3400	.5790
225.000	.0790	

MACH (1) = 2.498 BETAT (5) = 4.330

X/LNM	.200	.400
PHI		
135.000	.1930	
180.000	.3490	.3880
225.000	.0390	

MACH (1) = 2.499 BETAT (6) = 6.470

X/LNM	.200	.400
PHI		
135.000	.1010	
180.000	.3250	.2260
225.000	-.0380	

MACH (1) = 2.499 BETAT (7) = 8.600

X/LNM	.200	.400
PHI		
135.000	.0640	
180.000	.2210	.1120
225.000	-.1000	

AMES 87-757 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE17)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.540

PHI	X/LNM .200	.400
135.000	.3280	
180.000	.2440	.3200
225.000	.1260	

MACH (2) = 2.999 BETAT (2) = -4.240

PHI	X/LNM .200	.400
135.000	.2930	
180.000	.3080	.3400
225.000	.1010	

MACH (2) = 2.999 BETAT (3) = .060

PHI	X/LNM .200	.400
135.000	.2350	
180.000	.3010	.3810
225.000	.0350	

MACH (2) = 2.999 BETAT (4) = 4.410

PHI	X/LNM .200	.400
135.000	.2060	
180.000	.2820	.3510
225.000	.0780	

MACH (2) = 2.999 BETAT (5) = 8.760

PHI	X/LNM .200	.400
135.000	.0360	
180.000	.1740	.1370
225.000	-.0600	

MACH (3) = 3.502 BETAT (1) = -8.700

PHI	X/LNM .200	.400
135.000	.2390	
180.000	.1980	.3840
225.000	.0860	

MACH (3) = 3.502 BETAT (2) = -6.510

PHI	X/LNM .200	.400
135.000	.2660	
180.000	.1770	.2710
225.000	.1160	

MACH (3) = 3.502 BETAT (3) = -4.320

PHI	X/LNM .200	.400
135.000	.2760	
180.000	.2080	.2660
225.000	.0980	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE17)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.1880	
180.000	.2360	.2610
225.000	.0560	

MACH (3) = 3.502 BETAT (5) = 4.490

X/LNM	.200	.400
PHI		
135.000	.1560	
180.000	.1940	.2940
225.000	.0690	

MACH (3) = 3.502 BETAT (6) = 8.700

X/LNM	.200	.400
PHI		
135.000	.0670	
180.000	.1500	.2760
225.000	.0480	

MACH (3) = 3.502 BETAT (7) = 8.910

X/LNM	.200	.400
PHI		
135.000	.0770	
180.000	.1020	.2230
225.000	-.1690	

AMES 87-707 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE18) (15 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.420

X/LNM	.200	.400
PHI		
135.000	.2510	
180.000	.1870	.3450
225.000	.0820	

MACH (1) = 2.498 BETAT (2) = -6.300

X/LNM	.200	.400
PHI		
135.000	.3540	
180.000	.2300	.3340
225.000	.0730	

MACH (1) = 2.499 BETAT (3) = -4.180

X/LNM	.200	.400
PHI		
135.000	.3340	
180.000	.3370	.4340
225.000	.0610	

MACH (1) = 2.499 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.3060	
180.000	.2920	.4430
225.000	.0330	

MACH (1) = 2.498 BETAT (5) = 4.310

X/LNM	.200	.400
PHI		
135.000	.0940	
180.000	.3000	.1510
225.000	-.0030	

MACH (1) = 2.498 BETAT (6) = 8.430

X/LNM	.200	.400
PHI		
135.000	.0690	
180.000	.2640	.0570
225.000	-.0730	

MACH (1) = 2.498 BETAT (7) = 8.560

X/LNM	.200	.400
PHI		
135.000	.0310	
180.000	.1260	.0100
225.000	-.1370	

AMES 67-707 IA9 OBA + S3 + T9 OMS NOZZLE (RBNE18)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.580

X/LNM	.200	.400
PHI		
135.000	.2480	
180.000	.1740	.3890
225.000	.0630	

MACH (2) = 2.999 BETAT (2) = -4.260

X/LNM	.200	.400
PHI		
135.000	.2200	
180.000	.2000	.2560
225.000	.0750	

MACH (2) = 2.999 BETAT (3) = .060

X/LNM	.200	.400
PHI		
135.000	.1710	
180.000	.2100	.3310
225.000	.0320	

MACH (2) = 2.999 BETAT (4) = 4.390

X/LNM	.200	.400
PHI		
135.000	.1520	
180.000	.2290	.2740
225.000	.0490	

MACH (2) = 2.999 BETAT (5) = 8.720

X/LNM	.200	.400
PHI		
135.000	.0350	
180.000	.0930	.0030
225.000	-.0990	

MACH (3) = 3.502 BETAT (1) = -8.730

X/LNM	.200	.400
PHI		
135.000	.1860	
180.000	.1460	.3660
225.000	.0610	

MACH (3) = 3.502 BETAT (2) = -6.530

X/LNM	.200	.400
PHI		
135.000	.1940	
180.000	.1110	.2610
225.000	.0630	

MACH (3) = 3.502 BETAT (3) = -4.330

X/LNM	.200	.400
PHI		
135.000	.1660	
180.000	.1230	.1930
225.000	.0740	

AMES 87-767 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE18)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .060

X/LNM	.250	.400
PHI		
135.000	.1350	
180.000	.1670	.2250
225.000	.0210	

MACH (3) = 3.502 BETAT (5) = 4.470

X/LNM	.250	.400
PHI		
135.000	.1350	
180.000	.1510	.2970
225.000	.0280	

MACH (3) = 3.502 BETAT (6) = 6.670

X/LNM	.250	.400
PHI		
135.000	.1030	
180.000	.1190	.1920
225.000	-.0250	

MACH (3) = 3.502 BETAT (7) = 8.870

X/LNM	.250	.400
PHI		
135.000	.0590	
180.000	.0550	.0540
225.000	-.0690	

MES 87-707 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE19) (19 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 33.0000 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .000
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.430

X/LNM	.200	.400
PHI		
135.000	.1450	
180.000	.0850	.1720
225.000	.0710	

MACH (1) = 2.499 BETAT (2) = -6.310

X/LNM	.200	.400
PHI		
135.000	.1700	
180.000	.1170	.3070
225.000	.0850	

MACH (1) = 2.499 BETAT (3) = -4.180

X/LNM	.200	.400
PHI		
135.000	.2720	
180.000	.1900	.3600
225.000	.0230	

MACH (1) = 2.499 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.2700	
180.000	.2680	.2890
225.000	-.0270	

MACH (1) = 2.499 BETAT (5) = 4.300

X/LNM	.200	.400
PHI		
135.000	.0430	
180.000	.2400	.0220
225.000	-.0540	

MACH (1) = 2.499 BETAT (6) = 8.430

X/LNM	.200	.400
PHI		
135.000	-.0380	
180.000	.1890	-.1480
225.000	-.1160	

MACH (1) = 2.498 BETAT (7) = 8.550

X/LNM	.200	.400
PHI		
135.000	-.1040	
180.000	.0770	-.0720
225.000	-.1460	

AMES 87-767 IA9 C2A + S3 + T9 CMS NOZZLE (RBNE19)

SECTION (1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.580

X/LNM	.200	.400
PHI		
135.000	.1620	
180.000	.1380	.0940
225.000	.0890	

MACH (2) = 2.999 BETAT (2) = -4.260

X/LNM	.200	.400
PHI		
135.000	.1660	
180.000	.1400	.2590
225.000	.0390	

MACH (2) = 2.999 BETAT (3) = .060

X/LNM	.200	.400
PHI		
135.000	.1350	
180.000	.1550	.2690
225.000	.0670	

MACH (2) = 2.999 BETAT (4) = 4.380

X/LNM	.200	.400
PHI		
135.000	.1010	
180.000	.1950	.0840
225.000	.0050	

MACH (2) = 2.999 BETAT (5) = 8.710

X/LNM	.200	.400
PHI		
135.000	.0490	
180.000	.0010	-.0850
225.000	-.1150	

MACH (3) = 3.502 BETAT (1) = -8.740

X/LNM	.200	.400
PHI		
135.000	.1590	
180.000	.0960	.2280
225.000	.0570	

MACH (3) = 3.502 BETAT (2) = -6.540

X/LNM	.200	.400
PHI		
135.000	.1130	
180.000	.0910	.0650
225.000	.0800	

MACH (3) = 3.502 BETAT (3) = -4.340

X/LNM	.200	.400
PHI		
135.000	.0850	
180.000	.0480	.1870
225.000	.0340	

AMES 87-707 IA9 C2A + S3 + T9 CMS NOZZLE (RBNE19)

SECTION (1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .460

X/LNM	.200	.400
PHI		
135.000	.0940	
180.000	.1160	.2070
225.000	.0420	

MACH (3) = 3.502 BETAT (5) = 4.460

X/LNM	.200	.400
PHI		
135.000	.1240	
180.000	.1270	.2150
225.000	.0000	

MACH (3) = 3.502 BETAT (6) = 8.660

X/LNM	.200	.400
PHI		
135.000	.0650	
180.000	.0600	.0880
225.000	-.5610	

MACH (3) = 3.502 BETAT (7) = 8.880

X/LNM	.200	.400
PHI		
135.000	.0070	
180.000	-.0170	-.0680
225.000	-.0820	

AMES 87-707 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE20) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	4.000	ORBINC =	.500
RUDDER =	-10.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.410

X/LNM	.200	.400
PHI		
135.000	-.0210	
180.000	.0060	-.0600
225.000	.1220	

MACH (1) = 2.499 BETAT (2) = -6.290

X/LNM	.200	.400
PHI		
135.000	.1010	
180.000	-.0150	.1290
225.000	.0570	

MACH (1) = 2.499 BETAT (3) = -4.170

X/LNM	.200	.400
PHI		
135.000	.1080	
180.000	.0690	.2930
225.000	-.0100	

MACH (1) = 2.499 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.1660	
180.000	.1630	.2790
225.000	-.0480	

MACH (1) = 2.499 BETAT (5) = 4.310

X/LNM	.200	.400
PHI		
135.000	.0820	
180.000	.1730	-.0060
225.000	-.0840	

MACH (1) = 2.499 BETAT (6) = 6.430

X/LNM	.200	.400
PHI		
135.000	.0510	
180.000	.1430	-.0630
225.000	-.1330	

MACH (1) = 2.499 BETAT (7) = 8.560

X/LNM	.200	.400
PHI		
135.000	.0730	
180.000	.0120	-.1360
225.000	-.1470	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE2D)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.570

X/LNM	.200	.400
PHI		
135.000	.0400	
180.000	.1050	.0620
225.000	.0290	

MACH (2) = 2.999 BETAT (2) = -4.250

X/LNM	.200	.400
PHI		
135.000	.0950	
180.000	.0270	.1300
225.000	.0100	

MACH (2) = 2.999 BETAT (3) = .060

X/LNM	.200	.400
PHI		
135.000	.1130	
180.000	.1260	.1880
225.000	-.0190	

MACH (2) = 2.999 BETAT (4) = 4.390

X/LNM	.200	.400
PHI		
135.000	.0420	
180.000	.1370	.1110
225.000	-.1420	

MACH (2) = 2.999 BETAT (5) = 8.720

X/LNM	.200	.400
PHI		
135.000	.0380	
180.000	-.0470	-.1110
225.000	-.1030	

MACH (3) = 3.502 BETAT (1) = -8.720

X/LNM	.200	.400
PHI		
135.000	.0490	
180.000	.0810	.0870
225.000	-.0550	

MACH (3) = 3.502 BETAT (2) = -6.530

X/LNM	.200	.400
PHI		
135.000	.0250	
180.000	.0700	.0120
225.000	-.0480	

MACH (3) = 3.502 BETAT (3) = -4.330

X/LNM	.200	.400
PHI		
135.000	.0660	
180.000	.0250	-.0370
225.000	.0030	

AMES 87-707 IA9 O2A + S3 + T9 CMS NOZZLE (RBNE2U)

SECTION : 1)CMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.0400	
180.000	.0850	.1750
225.000	.0420	

MACH (3) = 3.502 BETAT (5) = 4.460

X/LNM	.200	.400
PHI		
135.000	.0250	
180.000	.0980	.0930
225.000	-.0300	

MACH (3) = 3.502 BETAT (6) = 6.670

X/LNM	.200	.400
PHI		
135.000	.0730	
180.000	.0860	-.0080
225.000	-.0550	

MACH (3) = 3.502 BETAT (7) = 8.870

X/LNM	.200	.400
PHI		
135.000	-.0520	
180.000	-.0790	-.0860
225.000	-.0890	

AMES 87-757 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE21) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	6.000	ORBINC =	.500
RUDDER =	-10.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.390

PHI	X/LNM .200	.400
135.000	-.0610	
180.000	-.0790	-.1280
225.000	.0130	

MACH (1) = 2.499 BETAT (2) = -6.280

PHI	X/LNM .200	.400
135.000	.0210	
180.000	-.0270	-.0170
225.000	.0290	

MACH (1) = 2.499 BETAT (3) = -4.170

PHI	X/LNM .200	.400
135.000	.0550	
180.000	.0210	.2660
225.000	-.0200	

MACH (1) = 2.499 BETAT (4) = .060

PHI	X/LNM .200	.400
135.000	.1280	
180.000	.1060	.2650
225.000	-.0530	

MACH (1) = 2.499 BETAT (5) = 4.310

PHI	X/LNM .200	.400
135.000	.1040	
180.000	.1520	.0160
225.000	-.0910	

MACH (1) = 2.498 BETAT (6) = 6.440

PHI	X/LNM .200	.400
135.000	.1220	
180.000	.1180	-.0620
225.000	-.1370	

MACH (1) = 2.499 BETAT (7) = 8.570

PHI	X/LNM .200	.400
135.000	.1450	
180.000	-.0010	-.1430
225.000	-.1420	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE21)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.550

X/LNM	.200	.400
PHI		
135.000	-.0020	
180.000	.0470	.0340
225.000	-.0490	

MACH (2) = 2.999 BETAT (2) = -4.240

X/LNM	.200	.400
PHI		
135.000	-.0300	
180.000	.0030	.0000
225.000	-.0090	

MACH (2) = 2.999 BETAT (3) = .060

X/LNM	.200	.400
PHI		
135.000	.0690	
180.000	.1090	.1920
225.000	-.0450	

MACH (2) = 2.999 BETAT (4) = 4.400

X/LNM	.200	.400
PHI		
135.000	-.0050	
180.000	.1180	.0740
225.000	-.0450	

MACH (2) = 2.999 BETAT (5) = 8.730

X/LNM	.200	.400
PHI		
135.000	-.0030	
180.000	-.0550	-.0930
225.000	-.1150	

MACH (3) = 3.502 BETAT (1) = -8.710

X/LNM	.200	.400
PHI		
135.000	.0200	
180.000	-.0090	.0340
225.000	-.0770	

MACH (3) = 3.502 BETAT (2) = -6.510

X/LNM	.200	.400
PHI		
135.000	-.0240	
180.000	.0290	.0250
225.000	-.0720	

MACH (3) = 3.502 BETAT (3) = -4.320

X/LNM	.200	.400
PHI		
135.000	-.0270	
180.000	-.0150	-.0510
225.000	-.0490	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE21)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.0450	
180.000	.0640	.1180
225.000	-.0140	

MACH (3) = 3.502 BETAT (5) = 4.475

X/LNM	.200	.400
PHI		
135.000	-.0160	
180.000	.0800	.1630
225.000	-.0350	

MACH (3) = 3.502 BETAT (6) = 6.670

X/LNM	.200	.400
PHI		
135.000	.0250	
180.000	.0790	-.0430
225.000	-.0420	

MACH (3) = 3.502 BETAT (7) = 8.890

X/LNM	.200	.400
PHI		
135.000	-.0570	
180.000	-.0860	-.0880
225.000	-.0890	

AMES 87-757 IA9 C2A + S3 + T9 OMS NOZZLE (RBNE22) (10 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .500
RUDDER = -10.000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.370

X/LNM	.200	.400
PHI		
135.000	-.0990	
180.000	-.1110	-.1460
225.000	-.0960	

MACH (1) = 2.499 BETAT (2) = -6.260

X/LNM	.200	.400
PHI		
135.000	-.0220	
180.000	-.0730	-.1260
225.000	-.0460	

MACH (1) = 2.499 BETAT (3) = -4.150

X/LNM	.200	.400
PHI		
135.000	.0050	
180.000	-.0190	.0800
225.000	-.0340	

MACH (1) = 2.499 BETAT (4) = .060

X/LNM	.200	.400
PHI		
135.000	.0950	
180.000	.0800	.2100
225.000	-.0640	

MACH (1) = 2.499 BETAT (5) = 4.330

X/LNM	.200	.400
PHI		
135.000	.1120	
180.000	.1300	.0620
225.000	-.0870	

MACH (1) = 2.499 BETAT (6) = 8.460

X/LNM	.200	.400
PHI		
135.000	.1230	
180.000	.1550	-.0180
225.000	-.1140	

MACH (1) = 2.499 BETAT (7) = 8.600

X/LNM	.200	.400
PHI		
135.000	.0330	
180.000	.0110	-.1310
225.000	-.1300	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE22)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.530

X/LNM	.200	.400
PHI		
135.000	-.0410	
180.000	-.0080	-.0890
225.000	-.1030	

MACH (2) = 2.999 BETAT (2) = -4.230

X/LNM	.200	.400
PHI		
135.000	-.0[illegible]70	
180.000	.0170	-.0410
225.000	-.0380	

MACH (2) = 2.999 BETAT (3) = .060

X/LNM	.200	.400
PHI		
135.000	.0550	
180.000	.0750	.2010
225.000	-.0320	

MACH (2) = 2.999 BETAT (4) = 4.400

X/LNM	.200	.400
PHI		
135.000	.0120	
180.000	.0950	-.0650
225.000	-.0550	

MACH (2) = 2.999 BETAT (5) = 8.750

X/LNM	.200	.400
PHI		
135.000	-.0710	
180.000	-.0820	-.0900
225.000	-.1090	

MACH (3) = 3.502 BETAT (1) = -8.680

X/LNM	.200	.400
PHI		
135.000	.0220	
180.000	-.0300	.0220
225.000	-.0910	

MACH (3) = 3.502 BETAT (2) = -6.490

X/LNM	.200	.400
PHI		
135.000	-.0140	
180.000	-.0360	-.0020
225.000	-.0910	

MACH (3) = 3.502 BETAT (3) = -4.310

X/LNM	.200	.400
PHI		
135.000	-.0480	
180.000	.0100	-.0410
225.000	-.0750	

AMES 87-707 IA9 O2A + S3 + T9 OMS NOZZLE (RBNE22)

SECTION (1)OMS NOZZLE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .060

X/LNM	.250	.450
PHI		
135.000	.0330	
180.000	.0520	.1230
225.000	-.0180	

MACH (3) = 3.502 BETAT (5) = 4.480

X/LNM	.250	.450
PHI		
135.000	-.0310	
180.000	.0390	-.0410
225.000	-.0440	

MACH (3) = 3.502 BETAT (6) = 6.700

X/LNM	.250	.450
PHI		
135.000	-.0630	
180.000	-.0190	-.0780
225.000	-.0490	

MACH (3) = 3.502 BETAT (7) = 8.910

X/LNM	.250	.450
PHI		
135.000	-.0720	
180.000	-.0710	-.0750
225.000	-.0960	

AMES 87-707 IA9 O2A + S3 + T9 BODY FLAP (RBNF01) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

BETAT =	.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 ALPHAT(1) = -8.100

X/LB	1.039
PHI	
.000	-.1030
40.000	-.1520

MACH (1) = 2.498 ALPHAT(2) = -6.070

X/LB	1.039
PHI	
.000	-.1030
40.000	-.1460

MACH (1) = 2.498 ALPHAT(3) = -4.030

X/LB	1.039
PHI	
.000	-.1010
40.000	-.1300

MACH (1) = 2.498 ALPHAT(4) = -2.000

X/LB	1.039
PHI	
.000	-.0910
40.000	-.1120

MACH (1) = 2.498 ALPHAT(5) = .000

X/LB	1.039
PHI	
.000	-.0850
40.000	-.1130

MACH (1) = 2.498 ALPHAT(6) = 1.930

X/LB	1.039
PHI	
.000	-.0750
40.000	-.0860

MACH (1) = 2.498 ALPHAT(7) = 3.900

X/LB	1.039
PHI	
.000	-.0690
40.000	-.0800

MACH (1) = 2.498 ALPHAT(8) = 5.950

X/LB	1.039
PHI	
.000	-.0570
40.000	-.0740

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF01)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 ALPHAT(9) = 8.010

X/LB	1.039
PHI	
.000	-.0440
40.000	-.0720

MACH (2) = 2.999 ALPHAT(1) = -8.070

X/LB	1.039
PHI	
.000	-.1040
40.000	-.1230

MACH (2) = 2.999 ALPHAT(2) = -6.100

X/LB	1.039
PHI	
.000	-.1060
40.000	-.1270

MACH (2) = 2.999 ALPHAT(3) = -4.070

X/LB	1.039
PHI	
.000	-.1010
40.000	-.1240

MACH (2) = 2.999 ALPHAT(4) = -2.000

X/LB	1.039
PHI	
.000	-.0970
40.000	-.1220

MACH (2) = 2.999 ALPHAT(5) = -.010

X/LB	1.039
PHI	
.000	-.0920
40.000	-.1210

MACH (2) = 2.999 ALPHAT(6) = 1.930

X/LB	1.039
PHI	
.000	-.0880
40.000	-.1220

MACH (2) = 2.999 ALPHAT(7) = 3.980

X/LB	1.039
PHI	
.000	-.0780
40.000	-.1190

MACH (2) = 2.999 ALPHAT(8) = 5.990

X/LB	1.039
PHI	
.000	-.0590
40.000	-.1140

AMES 87-707 IA9 O2A + S3 + T9 BODY FLAP (RBNF01)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 ALPHAT(9) = 8.000

X/LB	1.039
PHI	
.000	-.0390
40.000	-.0950

MACH (3) = 3.502 ALPHAT(1) = -8.080

X/LB	1.039
PHI	
.000	-.0870
40.000	-.0870

MACH (3) = 3.502 ALPHAT(2) = -6.080

X/LB	1.039
PHI	
.000	-.0880
40.000	-.0930

MACH (3) = 3.502 ALPHAT(3) = -4.070

X/LB	1.039
PHI	
.000	-.0880
40.000	-.0970

MACH (3) = 3.502 ALPHAT(4) = -2.020

X/LB	1.039
PHI	
.000	-.0760
40.000	-.0910

MACH (3) = 3.502 ALPHAT(5) = -.050

X/LB	1.039
PHI	
.000	-.0690
40.000	-.0910

MACH (3) = 3.502 ALPHAT(6) = 1.990

X/LB	1.039
PHI	
.000	-.0650
40.000	-.0940

MACH (3) = 3.502 ALPHAT(7) = 3.960

X/LB	1.039
PHI	
.000	-.0640
40.000	-.0930

MACH (3) = 3.502 ALPHAT(8) = 5.970

X/LB	1.039
PHI	
.000	-.0530
40.000	-.0900

AMES 87-757 IA9 C2A + S3 + T9 BODY FLAP (RBNFD1)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.952 ALPHAT(9) = 8.010

X/LB	1.039
PHI	
.000	-.0370
45.000	-.0795

AMES 87-707 IA9 OBA + S3 + T9 BODY FLAP (RBNF52) (19 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	-8.000	ORBINC =	.950
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP

DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.400

X/LB	1.039
PHI	
.000	-.1360
40.000	-.1310

MACH (1) = 2.498 BETAT (2) = -6.280

X/LB	1.039
PHI	
.000	-.1350
40.000	-.1460

MACH (1) = 2.498 BETAT (3) = -4.170

X/LB	1.039
PHI	
.000	-.1230
40.000	-.1570

MACH (1) = 2.498 BETAT (4) = -2.060

X/LB	1.039
PHI	
.000	-.1110
40.000	-.1610

MACH (1) = 2.498 BETAT (5) = 2.180

X/LB	1.039
PHI	
.000	-.1100
40.000	-.1190

MACH (1) = 2.498 BETAT (6) = 4.320

X/LB	1.039
PHI	
.000	-.1230
40.000	-.1120

MACH (1) = 2.498 BETAT (7) = 6.460

X/LB	1.039
PHI	
.000	-.1300
40.000	-.1150

MACH (1) = 2.498 BETAT (8) = 8.590

X/LB	1.039
PHI	
.000	-.1420
40.000	-.1380

AMES 87-707 IA9 O2A + S3 + T9 BODY FLAP (RBNFD2)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.560

X/LB	1.039
PHI	
.000	-.1160
40.000	-.0850

MACH (2) = 2.999 BETAT (2) = -6.490

X/LB	1.039
PHI	
.000	-.1150
40.000	-.0960

MACH (2) = 2.999 BETAT (3) = -4.250

X/LB	1.039
PHI	
.000	-.1120
40.000	-.1070

MACH (2) = 2.999 BETAT (4) = -2.100

X/LB	1.039
PHI	
.000	-.1090
40.000	-.1190

MACH (2) = 2.999 BETAT (5) = 2.230

X/LB	1.039
PHI	
.000	-.1070
40.000	-.1290

MACH (2) = 2.999 BETAT (6) = 4.490

X/LB	1.039
PHI	
.000	-.1090
40.000	-.1230

MACH (2) = 2.999 BETAT (7) = 6.580

X/LB	1.039
PHI	
.000	-.1200
40.000	-.1190

MACH (2) = 2.999 BETAT (8) = 8.750

X/LB	1.039
PHI	
.000	-.1210
40.000	-.0950

MACH (3) = 3.502 BETAT (1) = -8.710

X/LB	1.039
PHI	
.000	-.0840
40.000	-.0510

AMES 87-707 IA9 O2A + S3 + T9 BODY FLAP (RBNF02)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.520

X/LB	1.039
PHI	
.000	-.0900
40.000	-.0630

MACH (3) = 3.502 BETAT (3) = -4.330

X/LB	1.039
PHI	
.000	-.0840
40.000	-.0760

MACH (3) = 3.502 BETAT (4) = -2.140

X/LB	1.039
PHI	
.000	-.0820
40.000	-.0790

MACH (3) = 3.502 BETAT (5) = 2.260

X/LB	1.039
PHI	
.000	-.0890
40.000	-.0950

MACH (3) = 3.502 BETAT (6) = 4.480

X/LB	1.039
PHI	
.000	-.0850
40.000	-.0960

MACH (3) = 3.502 BETAT (7) = 6.690

X/LB	1.039
PHI	
.000	-.0910
40.000	-.0960

MACH (3) = 3.502 BETAT (8) = 8.910

X/LB	1.039
PHI	
.000	-.0950
40.000	-.0930

AMES 87-707 IA9 02A + S3 + T9 BODY FLAP (RBNF03) (15 MAY 73)

REFERENCE DATA

SREF =	2.4215	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8495	INCHES	YMRP =	.0000	INCHES
BREF =	39.8495	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHAT =	-6.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LB	1.039
PHI	
.000	-.1330
40.000	-.1300

MACH (1) = 2.498 BETAT (2) = -6.290

X/LB	1.039
PHI	
.000	-.1290
40.000	-.1420

MACH (1) = 2.498 BETAT (3) = -4.160

X/LB	1.039
PHI	
.000	-.1270
40.000	-.1570

MACH (1) = 2.498 BETAT (4) = -2.070

X/LB	1.039
PHI	
.000	-.1040
40.000	-.1590

MACH (1) = 2.498 BETAT (5) = 2.180

X/LB	1.039
PHI	
.000	-.1090
40.000	-.1150

MACH (1) = 2.498 BETAT (6) = 4.310

X/LB	1.039
PHI	
.000	-.1140
40.000	-.1010

MACH (1) = 2.498 BETAT (7) = 6.440

X/LB	1.039
PHI	
.000	-.1220
40.000	-.1160

MACH (1) = 2.498 BETAT (8) = 8.570

X/LB	1.039
PHI	
.000	-.1320
40.000	-.1300

AMES 87-707 IA9 02A + S3 + T9 BODY FLAP (RBNFD3)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.570

X/LB	1.039
PHI	
.000	-.1140
40.000	-.0880

MACH (2) = 2.999 BETAT (2) = -6.420

X/LB	1.039
PHI	
.000	-.1090
40.000	-.0930

MACH (2) = 2.999 BETAT (3) = -4.260

X/LB	1.039
PHI	
.000	-.1110
40.000	-.1050

MACH (2) = 2.999 BETAT (4) = -2.100

X/LB	1.039
PHI	
.000	-.1150
40.000	-.1180

MACH (2) = 2.999 BETAT (5) = 2.220

X/LB	1.039
PHI	
.000	-.1060
40.000	-.1290

MACH (2) = 2.999 BETAT (6) = 4.390

X/LB	1.039
PHI	
.000	-.1070
40.000	-.1200

MACH (2) = 2.999 BETAT (7) = 6.560

X/LB	1.039
PHI	
.000	-.1100
40.000	-.0920

MACH (2) = 2.999 BETAT (8) = 8.730

X/LB	1.039
PHI	
.000	-.1190
40.000	-.0940

MACH (3) = 3.502 BETAT (1) = -8.730

X/LB	1.039
PHI	
.000	-.0830
40.000	-.0490

AMES 87-707 IA9 O2A + S3 + T9 BODY FLAP (RBNF03)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.530

X/LB	1.039
PHI	
.000	-.0860
40.000	-.0620

MACH (3) = 3.502 BETAT (3) = -4.340

X/LB	1.039
PHI	
.000	-.0840
40.000	-.0780

MACH (3) = 3.502 BETAT (4) = -2.140

X/LB	1.039
PHI	
.000	-.0850
40.000	-.0860

MACH (3) = 3.502 BETAT (5) = 2.260

X/LB	1.039
PHI	
.000	-.0890
40.000	-.0970

MACH (3) = 3.502 BETAT (6) = 4.470

X/LB	1.039
PHI	
.000	-.0890
40.000	-.1010

MACH (3) = 3.502 BETAT (7) = 6.680

X/LB	1.039
PHI	
.000	-.0940
40.000	-.0970

MACH (3) = 3.502 BETAT (8) = 8.890

X/LB	1.039
PHI	
.000	-.0930
40.000	-.0910

AMES 87-707 IA9 C0A + S3 + T9 BODY FLAP (RBNFU4) (10 MAY 73)

REFERENCE DATA

SREF	=	2.4210 SQ.FT.	XMRP	=	28.5300 INCHES
LREF	=	39.8490 INCHES	YMRP	=	.0000 INCHES
BREF	=	39.8490 INCHES	ZMRP	=	.0000 INCHES
SCALE	=	.0300 SCALE			

PARAMETRIC DATA

ALPHAT =	-4.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP

DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

X/LB	1.039
PHI	
.000	-.1360
40.000	-.1340

MACH (1) = 2.498 BETAT (2) = -6.310

X/LB	1.039
PHI	
.000	-.1270
40.000	-.1440

MACH (1) = 2.498 BETAT (3) = -4.190

X/LB	1.039
PHI	
.000	-.1160
40.000	-.1520

MACH (1) = 2.498 BETAT (4) = -2.070

X/LB	1.039
PHI	
.000	-.0960
40.000	-.1500

MACH (1) = 2.498 BETAT (5) = 2.180

X/LB	1.039
PHI	
.000	-.1040
40.000	-.1140

MACH (1) = 2.498 BETAT (6) = 4.300

X/LB	1.039
PHI	
.000	-.1180
40.000	-.1060

MACH (1) = 2.498 BETAT (7) = 6.430

X/LB	1.039
PHI	
.000	-.1200
40.000	-.1150

MACH (1) = 2.498 BETAT (8) = 8.550

X/LB	1.039
PHI	
.000	-.1280
40.000	-.1270

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF04)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -6.580

X/LB	1.039
PHI	
.000	-.1030
40.000	-.0860

MACH (2) = 2.999 BETAT (2) = -6.420

X/LB	1.039
PHI	
.000	-.1150
40.000	-.0950

MACH (2) = 2.999 BETAT (3) = -4.260

X/LB	1.039
PHI	
.000	-.1050
40.000	-.1050

MACH (2) = 2.999 BETAT (4) = -2.110

X/LB	1.039
PHI	
.000	-.1040
40.000	-.1180

MACH (2) = 2.999 BETAT (5) = 2.210

X/LB	1.039
PHI	
.000	-.1050
40.000	-.1240

MACH (2) = 2.999 BETAT (6) = 4.380

X/LB	1.039
PHI	
.000	-.1030
40.000	-.1040

MACH (2) = 2.999 BETAT (7) = 6.550

X/LB	1.039
PHI	
.000	-.1160
40.000	-.0800

MACH (2) = 2.999 BETAT (8) = 8.710

X/LB	1.039
PHI	
.000	-.1090
40.000	-.0920

MACH (3) = 3.502 BETAT (1) = -8.740

X/LB	1.039
PHI	
.000	-.0860
40.000	-.0530

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF04)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.540

X/LB	1.039
PHI	
.000	-.0890
40.000	-.0670

MACH (3) = 3.502 BETAT (3) = -4.345

X/LB	1.039
PHI	
.000	-.0830
40.000	-.0760

MACH (3) = 3.502 BETAT (4) = -2.150

X/LB	1.039
PHI	
.000	-.0810
40.000	-.0860

MACH (3) = 3.502 BETAT (5) = 2.260

X/LB	1.039
PHI	
.000	-.0840
40.000	-.0970

MACH (3) = 3.502 BETAT (6) = 4.460

X/LB	1.039
PHI	
.000	-.0860
40.000	-.0940

MACH (3) = 3.502 BETAT (7) = 6.680

X/LB	1.039
PHI	
.000	-.0940
40.000	-.0950

MACH (3) = 3.502 BETAT (8) = 8.870

X/LB	1.039
PHI	
.000	-.0930
40.000	-.0790

AMES 87-707 IA9 O2A + S3 + T9 BODY FLAP (RBNF05) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHAT =	-2.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

X/LB	1.039
PHI	
.000	-.1340
40.000	-.1300

MACH (1) = 2.498 BETAT (2) = -6.310

X/LB	1.039
PHI	
.000	-.1190
40.000	-.1430

MACH (1) = 2.498 BETAT (3) = -4.190

X/LB	1.039
PHI	
.000	-.1100
40.000	-.1540

MACH (1) = 2.498 BETAT (4) = -2.070

X/LB	1.039
PHI	
.000	-.0940
40.000	-.1390

MACH (1) = 2.498 BETAT (5) = 2.180

X/LB	1.039
PHI	
.000	-.0990
40.000	-.1010

MACH (1) = 2.498 BETAT (6) = 4.300

X/LB	1.039
PHI	
.000	-.1140
40.000	-.1000

MACH (1) = 2.498 BETAT (7) = 6.420

X/LB	1.039
PHI	
.000	-.1140
40.000	-.1120

MACH (1) = 2.498 BETAT (8) = 8.540

X/LB	1.039
PHI	
.000	-.1240
40.000	-.1150

AMES 87-757 IA9 C2A + S3 + T9 BODY FLAP (RBNF05)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.590

X/LB	1.039
PHI	
.000	-.0940
40.000	-.0870

MACH (2) = 2.999 BETAT (2) = -6.440

X/LB	1.039
PHI	
.000	-.0990
40.000	-.0960

MACH (2) = 2.999 BETAT (3) = -4.270

X/LB	1.039
PHI	
.000	-.0890
40.000	-.1040

MACH (2) = 2.999 BETAT (4) = -2.110

X/LB	1.039
PHI	
.000	-.0940
40.000	-.1170

MACH (2) = 2.999 BETAT (5) = 2.220

X/LB	1.039
PHI	
.000	-.0990
40.000	-.1090

MACH (2) = 2.999 BETAT (6) = 4.370

X/LB	1.039
PHI	
.000	-.0850
40.000	-.0820

MACH (2) = 2.999 BETAT (7) = 6.530

X/LB	1.039
PHI	
.000	-.0870
40.000	-.0750

MACH (2) = 2.999 BETAT (8) = 8.700

X/LB	1.039
PHI	
.000	-.1000
40.000	-.0880

MACH (3) = 3.502 BETAT (1) = -8.750

X/LB	1.039
PHI	
.000	-.0840
40.000	-.0500

AMES 87-767 IA9 C2A + S3 + T9 BODY FLAP (RBNF05)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.540

X/LB	1.039
PHI	
.000	-.1040
40.000	-.1640

MACH (3) = 3.502 BETAT (3) = -4.350

X/LB	1.039
PHI	
.000	-.0730
40.000	-.0770

MACH (3) = 3.502 BETAT (4) = -2.140

X/LB	1.039
PHI	
.000	-.0760
40.000	-.0870

MACH (3) = 3.502 BETAT (5) = 2.260

X/LB	1.039
PHI	
.000	-.0770
40.000	-.0930

MACH (3) = 3.502 BETAT (6) = 4.460

X/LB	1.039
PHI	
.000	-.0740
40.000	-.0790

MACH (3) = 3.502 BETAT (7) = 6.680

X/LB	1.039
PHI	
.000	-.0690
40.000	-.0750

MACH (3) = 3.502 BETAT (8) = 8.860

X/LB	1.039
PHI	
.000	-.0910
40.000	-.0710

AMES 87-7U7 IA9 02A + S3 + T9 BODY FLAP (FBNFU6) (15 MAY 73)

REFERENCE DATA

SREF =	2.421) SQ.FT.	XMRP =	28.53U) INCHES		
LREF =	39.849) INCHES	YMRP =	.1111) INCHES		
BREF =	39.849) INCHES	ZMRP =	.1111) INCHES		
SCALE =	.U3U) SCALE				

PARAMETRIC DATA

ALPHAT =	.111)	ORBINC =	.5U)
RUDDER =	.111)	ELEVON =	.111)
RUDFLP =	.111)		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.43) X/LB 1.U39

PHI	
.111)	-.125)
45.111)	-.125)

MACH (1) = 2.498 BETAT (2) = -6.31) X/LB 1.U39

PHI	
.111)	-.11U)
45.111)	-.14U)

MACH (1) = 2.498 BETAT (3) = -4.19) X/LB 1.U39

PHI	
.111)	-.15U)
45.111)	-.16U)

MACH (1) = 2.498 BETAT (4) = -2.U7) X/LB 1.U39

PHI	
.111)	-.U85)
45.111)	-.139)

MACH (1) = 2.498 BETAT (5) = 2.17) X/LB 1.U39

PHI	
.111)	-.U95)
45.111)	-.U87)

MACH (1) = 2.498 BETAT (6) = 4.29) X/LB 1.U39

PHI	
.111)	-.111)
45.111)	-.U93)

MACH (1) = 2.498 BETAT (7) = 6.41) X/LB 1.U39

PHI	
.111)	-.119)
45.111)	-.157)

MACH (1) = 2.498 BETAT (8) = 8.54) X/LB 1.U39

PHI	
.111)	-.12U)
45.111)	-.112)

AMES 87-757 IA9 C2A + S3 + T9 BODY FLAP (RBNF06)

SECTION : 1;BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.590

X/LB	1.039
PHI	
.000	-.0970
45.000	-.0845

MACH (2) = 2.999 BETAT (2) = -6.430

X/LB	1.039
PHI	
.000	-.0920
45.000	-.0990

MACH (2) = 2.999 BETAT (3) = -4.270

X/LB	1.039
PHI	
.000	-.0870
45.000	-.1070

MACH (2) = 2.999 BETAT (4) = -2.110

X/LB	1.039
PHI	
.000	-.0870
45.000	-.1170

MACH (2) = 2.999 BETAT (5) = 2.215

X/LB	1.039
PHI	
.000	-.0870
45.000	-.0970

MACH (2) = 2.999 BETAT (6) = 4.370

X/LB	1.039
PHI	
.000	-.0850
45.000	-.0820

MACH (2) = 2.999 BETAT (7) = 6.530

X/LB	1.039
PHI	
.000	-.0920
45.000	-.0790

MACH (2) = 2.999 BETAT (8) = 8.690

X/LB	1.039
PHI	
.000	-.1010
45.000	-.0840

MACH (3) = 3.502 BETAT (1) = -8.750

X/LB	1.039
PHI	
.000	-.0810
45.000	-.0540

AMES 87-757 IA9 OEA + S3 + T9 BODY FLAP (REN756)

SECTION ' 1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.55D

X/LB	1.039
PHI	
.000	-.1485
45.000	-.1465

MACH (3) = 3.502 BETAT (3) = -4.34D

X/LB	1.039
PHI	
.000	-.0735
45.000	-.0886

MACH (3) = 3.502 BETAT (4) = -2.15D

X/LB	1.039
PHI	
.000	-.0736
45.000	-.0889

MACH (3) = 3.502 BETAT (5) = 2.20D

X/LB	1.039
PHI	
.000	-.0719
45.000	-.0879

MACH (3) = 3.502 BETAT (6) = 4.45D

X/LB	1.039
PHI	
.000	-.0755
45.000	-.0760

MACH (3) = 3.502 BETAT (7) = 6.65D

X/LB	1.039
PHI	
.000	-.0933
45.000	-.0775

MACH (3) = 3.502 BETAT (8) = 8.85D

X/LB	1.039
PHI	
.000	-.0919
45.000	-.0725

AMES 87-707 IA9 O2A + S3 + T9 BODY FLAP (RBNFU7) (10 MAY 73)

REFERENCE DATA

SREF =	2.4215	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHAT =	2.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -9.430

X/LB	1.039
PHI	
.000	-.1150
40.000	-.1230

MACH (1) = 2.498 BETAT (2) = -6.310

X/LB	1.039
PHI	
.000	-.1180
40.000	-.1340

MACH (1) = 2.498 BETAT (3) = -4.190

X/LB	1.039
PHI	
.000	-.0960
40.000	-.1480

MACH (1) = 2.498 BETAT (4) = -2.060

X/LB	1.039
PHI	
.000	-.0830
40.000	-.1260

MACH (1) = 2.498 BETAT (5) = 2.170

X/LB	1.039
PHI	
.000	-.0880
40.000	-.0780

MACH (1) = 2.498 BETAT (6) = 4.290

X/LB	1.039
PHI	
.000	-.0990
40.000	-.0890

MACH (1) = 2.498 BETAT (7) = 6.410

X/LB	1.039
PHI	
.000	-.1110
40.000	-.1020

MACH (1) = 2.498 BETAT (8) = 8.540

X/LB	1.039
PHI	
.000	-.1220
40.000	-.1060

AMES 87-707 IA9 02A + S3 + T9 BODY FLAP (RBNF57)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.595

X/LB	1.039
PHI	
.000	-.0980
40.000	-.0830

MACH (2) = 2.999 BETAT (2) = -6.420

X/LB	1.039
PHI	
.000	-.0880
40.000	-.0960

MACH (2) = 2.999 BETAT (3) = -4.270

X/LB	1.039
PHI	
.000	-.0830
40.000	-.1190

MACH (2) = 2.999 BETAT (4) = -2.119

X/LB	1.039
PHI	
.000	-.0830
40.000	-.1180

MACH (2) = 2.999 BETAT (5) = 2.215

X/LB	1.039
PHI	
.000	-.0840
40.000	-.0980

MACH (2) = 2.999 BETAT (6) = 4.370

X/LB	1.039
PHI	
.000	-.0790
40.000	-.0760

MACH (2) = 2.999 BETAT (7) = 6.530

X/LB	1.039
PHI	
.000	-.0870
40.000	-.0810

MACH (2) = 2.999 BETAT (8) = 8.690

X/LB	1.039
PHI	
.000	-.0980
40.000	-.0830

MACH (3) = 3.502 BETAT (1) = -8.730

X/LB	1.039
PHI	
.000	-.0850
40.000	-.0590

AMES 87-707 IA9 02A + S3 + T9 BODY FLAP (RBNF07)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.540

X/LB	1.039
PHI	
.000	-.0780
40.000	-.0700

MACH (3) = 3.502 BETAT (3) = -4.340

X/LB	1.039
PHI	
.000	-.0680
40.000	-.0780

MACH (3) = 3.502 BETAT (4) = -2.140

X/LB	1.039
PHI	
.000	-.0660
40.000	-.0890

MACH (3) = 3.502 BETAT (5) = 2.250

X/LB	1.039
PHI	
.000	-.0690
40.000	-.0850

MACH (3) = 3.502 BETAT (6) = 4.460

X/LB	1.039
PHI	
.000	-.0700
40.000	-.0720

MACH (3) = 3.502 BETAT (7) = 6.660

X/LB	1.039
PHI	
.000	-.0880
40.000	-.0720

MACH (3) = 3.502 BETAT (8) = 8.850

X/LB	1.039
PHI	
.000	-.0910
40.000	-.0720

AMES 87-757 IA9 O2A + S3 + T9 BODY FLAP (PBNFD8) (15 MAY 73)

REFERENCE DATA

SREF =	2.4215 SQ.FT.	XMRP =	28.5350 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0350 SCALE				

PARAMETRIC DATA

ALPHAT =	4.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -9.420

X/LB	1.039
PHI	
.000	-.1030
45.000	-.1230

MACH (1) = 2.498 BETAT (2) = -6.300

X/LB	1.039
PHI	
.000	-.1510
45.000	-.1310

MACH (1) = 2.498 BETAT (3) = -4.190

X/LB	1.039
PHI	
.000	-.0910
45.000	-.1420

MACH (1) = 2.498 BETAT (4) = -2.070

X/LB	1.039
PHI	
.000	-.0780
45.000	-.1140

MACH (1) = 2.498 BETAT (5) = 2.170

X/LB	1.039
PHI	
.000	-.0600
45.000	-.0730

MACH (1) = 2.498 BETAT (6) = 4.300

X/LB	1.039
PHI	
.000	-.0890
45.000	-.0840

MACH (1) = 2.498 BETAT (7) = 6.420

X/LB	1.039
PHI	
.000	-.1050
45.000	-.0990

MACH (1) = 2.498 BETAT (8) = 8.550

X/LB	1.039
PHI	
.000	-.1150
45.000	-.1570

AMES 87-757 IA9 C2A + S3 + T9 BODY FLAP (RBNF08)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.039
PHI	
.000	-.0960
40.000	-.0830

MACH (2) = 2.999 BETAT (2) = -6.420

X/LB	1.039
PHI	
.000	-.0850
40.000	-.0950

MACH (2) = 2.999 BETAT (3) = -4.260

X/LB	1.039
PHI	
.000	-.0740
40.000	-.1030

MACH (2) = 2.999 BETAT (4) = -2.100

X/LB	1.039
PHI	
.000	-.0730
40.000	-.1130

MACH (2) = 2.999 BETAT (5) = 2.210

X/LB	1.039
PHI	
.000	-.0750
40.000	-.0940

MACH (2) = 2.999 BETAT (6) = 4.370

X/LB	1.039
PHI	
.000	-.0810
40.000	-.0730

MACH (2) = 2.999 BETAT (7) = 6.540

X/LB	1.039
PHI	
.000	-.0810
40.000	-.0780

MACH (2) = 2.999 BETAT (8) = 8.700

X/LB	1.039
PHI	
.000	-.0950
40.000	-.0820

MACH (3) = 3.502 BETAT (1) = -8.720

X/LB	1.039
PHI	
.000	-.0810
40.000	-.0550

AMES 87-707 IA9 02A + S3 + T9 BODY FLAP (RBNF08)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.53D

	X/LB	1.039
	PHI	
	.000	-.572D
	40.000	-.066D

MACH (3) = 3.502 BETAT (3) = -4.33D

	X/LB	1.039
	PHI	
	.000	-.063D
	40.000	-.076D

MACH (3) = 3.502 BETAT (4) = -2.14D

	X/LB	1.039
	PHI	
	.000	-.064D
	40.000	-.084D

MACH (3) = 3.502 BETAT (5) = 2.26D

	X/LB	1.039
	PHI	
	.000	-.066D
	40.000	-.083D

MACH (3) = 3.502 BETAT (6) = 4.46D

	X/LB	1.039
	PHI	
	.000	-.069D
	40.000	-.075D

MACH (3) = 3.502 BETAT (7) = 6.66D

	X/LB	1.039
	PHI	
	.000	-.076D
	40.000	-.063D

MACH (3) = 3.502 BETAT (8) = 8.86D

	X/LB	1.039
	PHI	
	.000	-.091D
	40.000	-.075D



WING 27-7.7 TAB CGA + 13 + 73 BODY FLAP (CSIRO) (11 MAY 73)

REFERENCE DATA

PARAMETRIC DATA

SREF = 2.421[illegible] SQ.FT. CMAC = 28.53[illegible] INCHES
LREF = 33.843[illegible] INCHES XMRC = [illegible] INCHES
BREF = 33.843[illegible] INCHES ZMRC = [illegible] INCHES
SCALE = [illegible] SCALE

ALPHA* = [illegible] DELTA = [illegible]
BODDEF = [illegible] TLOCIN = [illegible]
FLAP = [illegible]

SECTION 1 :BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETA (1) = -8.41[illegible] M/L 1.039
CM:
[illegible] [illegible]
[illegible] [illegible]

MACH (1) = 2.498 BETA (2) = -6.29[illegible] M/L 1.039
CM:
[illegible] [illegible]
[illegible] [illegible]

MACH (1) = 2.498 BETA (3) = -4.17[illegible] M/L 1.039
CM:
[illegible] [illegible]
[illegible] [illegible]

MACH (1) = 2.498 BETA (4) = -2.05[illegible] M/L 1.039
CM:
[illegible] [illegible]
[illegible] [illegible]

MACH (1) = 2.498 BETA (5) = 2.18[illegible] M/L 1.039
CM:
[illegible] [illegible]
[illegible] [illegible]

MACH (1) = 2.498 BETA (6) = 4.30[illegible] M/L 1.039
CM:
[illegible] [illegible]
[illegible] [illegible]

MACH (1) = 2.498 BETA (7) = 6.40[illegible] M/L 1.039
CM:
[illegible] [illegible]
[illegible] [illegible]

MACH (1) = 2.498 BETA (8) = 8.57[illegible] M/L 1.039
CM:
[illegible] [illegible]
[illegible] [illegible]

AMES 87-707 IA9 02A + S3 + T9 BODY FLAP (RBNF09)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.560

X/LB	1.039
PHI	
.000	-.0900
40.000	-.0760

MACH (2) = 2.999 BETAT (2) = -6.440

X/LB	1.039
PHI	
.000	-.0770
40.000	-.0910

MACH (2) = 2.999 BETAT (3) = -4.250

X/LB	1.039
PHI	
.000	-.0690
40.000	-.1030

MACH (2) = 2.999 BETAT (4) = -2.190

X/LB	1.039
PHI	
.000	-.0590
40.000	-.1120

MACH (2) = 2.999 BETAT (5) = 2.210

X/LB	1.039
PHI	
.000	-.0560
40.000	-.0700

MACH (2) = 2.999 BETAT (6) = 4.380

X/LB	1.039
PHI	
.000	-.0670
40.000	-.0620

MACH (2) = 2.999 BETAT (7) = 6.550

X/LB	1.039
PHI	
.000	-.0690
40.000	-.0710

MACH (2) = 2.999 BETAT (8) = 8.720

X/LB	1.039
PHI	
.000	-.0860
40.000	-.0780

MACH (3) = 3.502 BETAT (1) = -8.710

X/LB	1.039
PHI	
.000	-.0880
40.000	-.0580

AMES 87-757 IA9 OEA + S3 + T9 BODY FLAP (RBNF09)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.51◊

X/LB	1.039
PHI	
.000	-.0715
45.000	-.0655

MACH (3) = 3.502 BETAT (3) = -4.32◊

X/LB	1.039
PHI	
.000	-.0577
45.000	-.0760

MACH (3) = 3.502 BETAT (4) = -2.13◊

X/LB	1.039
PHI	
.000	-.0519
45.000	-.0899

MACH (3) = 3.502 BETAT (5) = 2.26◊

X/LB	1.039
PHI	
.000	-.0500
45.000	-.0759

MACH (3) = 3.502 BETAT (6) = 4.47◊

X/LB	1.039
PHI	
.000	-.0620
45.000	-.0700

MACH (3) = 3.502 BETAT (7) = 6.67◊

X/LB	1.039
PHI	
.000	-.0720
45.000	-.0640

MACH (3) = 3.502 BETAT (8) = 8.88◊

X/LB	1.039
PHI	
.000	-.0690
45.000	-.0740

AMES 87-757 IA9 O2A + S3 + T9 BODY FLAP (RBNF10) (10 MAY 73)

REFERENCE DATA

SREF =	2.4215	SQ.FT.	XMRP =	28.5390	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHAT =	8.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.380

X/LD	1.039
PHI	
.000	-.0690
40.000	-.1280

MACH (1) = 2.498 BETAT (2) = -6.270

X/LB	1.039
PHI	
.000	-.0690
40.000	-.1300

MACH (1) = 2.498 BETAT (3) = -4.170

X/LB	1.039
PHI	
.000	-.0560
40.000	-.1250

MACH (1) = 2.498 BETAT (4) = -2.060

X/LB	1.039
PHI	
.000	-.0470
40.000	-.0850

MACH (1) = 2.498 BETAT (5) = 2.180

X/LB	1.039
PHI	
.000	-.0520
40.000	-.0630

MACH (1) = 2.498 BETAT (6) = 4.320

X/LB	1.039
PHI	
.000	-.0550
40.000	-.0690

MACH (1) = 2.498 BETAT (7) = 6.450

X/LB	1.039
PHI	
.000	-.0740
40.000	-.0810

MACH (1) = 2.498 BETAT (8) = 8.580

X/LB	1.039
PHI	
.000	-.0760
40.000	-.0890

AMES 87-737 1A9 OEA + S3 + T9 BODY FLAP (RBNF1U)

SECTION 1 1:BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.54U

X/LB	1.039
PHI	
.000	-.084U
45.000	-.079U

MACH (2) = 2.999 BETAT (2) = -6.39U

X/LB	1.039
PHI	
.000	-.065U
45.000	-.089U

MACH (2) = 2.999 BETAT (3) = -4.24U

X/LB	1.039
PHI	
.000	-.063U
45.000	-.104U

MACH (2) = 2.999 BETAT (4) = -2.09U

X/LB	1.039
PHI	
.000	-.052U
45.000	-.116U

MACH (2) = 2.999 BETAT (5) = 2.23U

X/LB	1.039
PHI	
.000	-.053U
45.000	-.068U

MACH (2) = 2.999 BETAT (6) = 4.40U

X/LB	1.039
PHI	
.000	-.055U
45.000	-.055U

MACH (2) = 2.999 BETAT (7) = 6.57U

X/LB	1.039
PHI	
.000	-.065U
45.000	-.057U

MACH (2) = 2.999 BETAT (8) = 8.74U

X/LB	1.039
PHI	
.000	-.080U
45.000	-.085U

MACH (3) = 3.502 BETAT (1) = -8.69U

X/LB	1.039
PHI	
.000	-.077U
45.000	-.053U

AMES 87-757 IA9 OEA + 33 + 79 BODY FLAP (RBNF16)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.962 BETAT (2) = -8.500

X/LB	1.039
PHI	
.000	-.1406
45.000	-.1630

MACH (3) = 3.962 BETAT (3) = -4.315

X/LB	1.039
PHI	
.000	-.1495
45.000	-.5735

MACH (3) = 3.962 BETAT (4) = -2.130

X/LB	1.039
PHI	
.000	-.1539
45.000	-.1840

MACH (3) = 3.962 BETAT (5) = 2.280

X/LB	1.039
PHI	
.000	-.1588
45.000	-.1725

MACH (3) = 3.962 BETAT (6) = 4.480

X/LB	1.039
PHI	
.000	-.1499
45.000	-.1653

MACH (3) = 3.962 BETAT (7) = 6.680

X/LB	1.039
PHI	
.000	-.1560
45.000	-.1499

MACH (3) = 3.962 BETAT (8) = 8.930

X/LB	1.039
PHI	
.000	-.1702
45.000	-.1680

AMES 87-757 IA9 ORA + 33 + 79 BODY FLAP (FBNF11) (10 MAY 73)

REFERENCE DATA

SREF = 2.421 SQ.FT. XMRP = 28.530 INCHES
LREF = 39.849 INCHES YMRP = .000 INCHES
BREF = 39.849 INCHES ZMRP = .000 INCHES
SCALE = .030 SCALE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .000
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -9.39

X/LB	1.039
PHI	
.000	-.127
45.000	-.122

MACH (1) = 2.498 BETAT (2) = -6.27

X/LB	1.039
PHI	
.000	-.123
45.000	-.142

MACH (1) = 2.498 BETAT (3) = -4.18

X/LB	1.039
PHI	
.000	-.113
45.000	-.152

MACH (1) = 2.498 BETAT (4) = .06

X/LB	1.039
PHI	
.000	-.151
45.000	-.146

MACH (1) = 2.498 BETAT (5) = 4.33

X/LB	1.039
PHI	
.000	-.114
45.000	-.152

MACH (1) = 2.498 BETAT (6) = 6.46

X/LB	1.039
PHI	
.000	-.117
45.000	-.159

MACH (1) = 2.498 BETAT (7) = 8.60

X/LB	1.039
PHI	
.000	-.134
45.000	-.139

MACH (2) = 2.999 BETAT (1) = -8.56

X/LB	1.039
PHI	
.000	-.149
45.000	-.085

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF11)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.41D

X/LB	1.039
PHI	
.000	-.1090
40.000	-.0960

MACH (2) = 2.999 BETAT (3) = -4.26D

X/LB	1.039
PHI	
.000	-.1570
40.000	-.1040

MACH (2) = 2.999 BETAT (4) = .05D

X/LB	1.039
PHI	
.000	-.1030
40.000	-.1210

MACH (2) = 2.999 BETAT (5) = 4.41D

X/LB	1.039
PHI	
.000	-.1570
40.000	-.1210

MACH (2) = 2.999 BETAT (6) = 6.58D

X/LB	1.039
PHI	
.000	-.1180
40.000	-.1130

MACH (2) = 2.999 BETAT (7) = 8.75D

X/LB	1.039
PHI	
.000	-.1220
40.000	-.1030

MACH (3) = 3.502 BETAT (1) = -8.71D

X/LB	1.039
PHI	
.000	-.0790
40.000	-.0460

MACH (3) = 3.502 BETAT (2) = -6.52D

X/LB	1.039
PHI	
.000	-.0820
40.000	-.0570

MACH (3) = 3.502 BETAT (3) = -4.33D

X/LB	1.039
PHI	
.000	-.0810
40.000	-.0720

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF11)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .050

X/LB	1.039
PHI	
.000	-.0870
45.000	-.0890

MACH (3) = 3.502 BETAT (5) = 4.470

X/LB	1.039
PHI	
.000	-.0870
45.000	-.0965

MACH (3) = 3.502 BETAT (6) = 6.690

X/LB	1.039
PHI	
.000	-.0900
45.000	-.0940

MACH (3) = 3.502 BETAT (7) = 8.900

X/LB	1.039
PHI	
.000	-.0900
45.000	-.0860

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF12) (10 MAY 73)

REFERENCE DATA

SREF =	2.421	SQ.FT.	XMRP =	28.538	INCHES
LREF =	39.849	INCHES	YMRP =	.000	INCHES
BREF =	39.849	INCHES	ZMRP =	.000	INCHES
SCALE =	.030	SCALE			

PARAMETRIC DATA

ALPHAT =	-4.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LB	1.039
PHI	
.000	-.1290
40.000	-.1260

MACH (1) = 2.498 BETAT (2) = -6.300

X/LB	1.039
PHI	
.000	-.1170
40.000	-.1380

MACH (1) = 2.498 BETAT (3) = -4.180

X/LB	1.039
PHI	
.000	-.1150
40.000	-.1490

MACH (1) = 2.498 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.0680
40.000	-.1160

MACH (1) = 2.498 BETAT (5) = 4.310

X/LB	1.039
PHI	
.000	-.1170
40.000	-.0980

MACH (1) = 2.498 BETAT (6) = 6.430

X/LB	1.039
PHI	
.000	-.1150
40.000	-.1120

MACH (1) = 2.498 BETAT (7) = 8.560

X/LB	1.039
PHI	
.000	-.1220
40.000	-.1220

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.039
.HI	
.000	-.1030
40.000	-.0870

AMES 87-757 IA9 C2A + S3 + T9 BODY FLAP (RBNF12)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.430 X/LB 1.039

PHI	
.000	-.1190
40.000	-.0980

MACH (2) = 2.999 BETAT (3) = -4.270 X/LB 1.039

PHI	
.000	-.1050
40.000	-.1070

MACH (2) = 2.999 BETAT (4) = .050 X/LB 1.039

PHI	
.000	-.0970
40.000	-.1180

MACH (2) = 2.999 BETAT (5) = 4.380 X/LB 1.039

PHI	
.000	-.1010
40.000	-.0980

MACH (2) = 2.999 BETAT (6) = 6.550 X/LB 1.039

PHI	
.000	-.1140
40.000	-.0810

MACH (2) = 2.999 BETAT (7) = 8.710 X/LB 1.039

PHI	
.000	-.1010
40.000	-.0880

MACH (3) = 3.502 BETAT (1) = -8.740 X/LB 1.039

PHI	
.000	-.0820
40.000	-.0480

MACH (3) = 3.502 BETAT (2) = -6.540 X/LB 1.039

PHI	
.000	-.0900
40.000	-.0670

MACH (3) = 3.502 BETAT (3) = -4.350 X/LB 1.039

PHI	
.000	-.0840
40.000	-.0780

AMES 87-767 IA9 OBA + S3 + T9 BODY FLAP (RBNF12)

SECTION : 1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .050

X/LB	1.039
PHI	
.000	-.0750
45.000	-.0860

MACH (3) = 3.502 BETAT (5) = 4.480

X/LB	1.039
PHI	
.000	-.0840
45.000	-.0940

MACH (3) = 3.502 BETAT (6) = 8.680

X/LB	1.039
PHI	
.000	-.0920
45.000	-.0910

MACH (3) = 3.502 BETAT (7) = 8.880

X/LB	1.039
PHI	
.000	-.0960
45.000	-.0750

AMES 87-707 IA9 02A + S3 + T9 BODY FLAP (RBNF13) (15 MAY 73)

REFERENCE DATA

SREF =	2.4215 SQ.FT.	XMRP =	28.5300 INCHES
LREF =	39.9490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

PARAMETRIC DATA

ALPHAT =	.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP

DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LB	1.039
PHI	
.000	-.1160
40.000	-.1200

MACH (1) = 2.498 BETAT (2) = -6.300

X/LB	1.039
PHI	
.000	-.1010
40.000	-.1360

MACH (1) = 2.498 BETAT (3) = -4.180

X/LB	1.039
PHI	
.000	-.0950
40.000	-.1450

MACH (1) = 2.498 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.0740
40.000	-.1010

MACH (1) = 2.498 BETAT (5) = 4.300

X/LB	1.039
PHI	
.000	-.1020
40.000	-.0860

MACH (1) = 2.498 BETAT (6) = 6.420

X/LB	1.039
PHI	
.000	-.1080
40.000	-.0990

MACH (1) = 2.498 BETAT (7) = 8.540

X/LB	1.039
PHI	
.000	-.1130
40.000	-.1070

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.039
PHI	
.000	-.0920
40.000	-.0800

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF13)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.420

X/LB	1.039
PHI	
.000	-.0850
40.000	-.0990

MACH (2) = 2.999 BETAT (3) = -4.260

X/LB	1.039
PHI	
.000	-.0800
40.000	-.0990

MACH (2) = 2.999 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.0890
40.000	-.1160

MACH (2) = 2.999 BETAT (5) = 4.380

X/LB	1.039
PHI	
.000	-.0780
40.000	-.0740

MACH (2) = 2.999 BETAT (6) = 6.540

X/LB	1.039
PHI	
.000	-.0860
40.000	-.0760

MACH (2) = 2.999 BETAT (7) = 8.690

X/LB	1.039
PHI	
.000	-.0900
40.000	-.0750

MACH (3) = 3.502 BETAT (1) = -8.750

X/LB	1.039
PHI	
.000	-.0550
40.000	-.0490

MACH (3) = 3.502 BETAT (2) = -6.550

X/LB	1.039
PHI	
.000	-.0810
40.000	-.0620

MACH (3) = 3.502 BETAT (3) = -4.350

X/LB	1.039
PHI	
.000	-.0560
40.000	-.0760

AMES 87-707 IA9 ORA + S3 + T9 BODY FLAP (RBNF13)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .550 X/LB 1.039
PHI
.000 -.5550
45.000 -.5885

MACH (3) = 3.502 BETAT (5) = 4.450 X/LB 1.039
PHI
.000 -.5470
45.000 -.5715

MACH (3) = 3.502 BETAT (6) = 6.650 X/LB 1.039
PHI
.000 -.5590
45.000 -.5750

MACH (3) = 3.502 BETAT (7) = 8.840 X/LB 1.039
PHI
.000 -.5080
45.000 -.4680

AMES 87-757 IA9 OEA + S3 + T9 BODY FLAP (RBNF14) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8499 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8499 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0500 SCALE				

PARAMETRIC DATA

ALPHAT =	4.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP

DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.419

X/LB	1.039
PHI	
.000	-.1980
45.000	-.1190

MACH (1) = 2.498 BETAT (2) = -6.299

X/LB	1.039
PHI	
.000	-.0940
45.000	-.1250

MACH (1) = 2.498 BETAT (3) = -4.180

X/LB	1.039
PHI	
.000	-.1010
45.000	-.1330

MACH (1) = 2.498 BETAT (4) = -.060

X/LB	1.039
PHI	
.000	-.0630
45.000	-.0710

MACH (1) = 2.498 BETAT (5) = 4.319

X/LB	1.039
PHI	
.000	-.0830
45.000	-.0780

MACH (1) = 2.498 BETAT (6) = 8.438

X/LB	1.039
PHI	
.000	-.0950
45.000	-.0900

MACH (1) = 2.498 BETAT (7) = 8.560

X/LB	1.039
PHI	
.000	-.1130
45.000	-.1510

MACH (2) = 2.999 BETAT (1) = -8.560

X/LB	1.039
PHI	
.000	-.1080
45.000	-.0750

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AMES 87-757 IA9 02A + S3 + T9 BODY FLAP

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -5.415

X/LB	1.039
PHI	
.000	-.0790
45.000	-.0890

MACH (2) = 2.999 BETAT (3) = -4.250

X/LB	1.039
PHI	
.000	-.0650
45.000	-.0990

MACH (2) = 2.999 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.0710
45.000	-.1110

MACH (2) = 2.999 BETAT (5) = 4.380

X/LB	1.039
PHI	
.000	-.0760
45.000	-.0670

MACH (2) = 2.999 BETAT (6) = 6.550

X/LB	1.039
PHI	
.000	-.0760
45.000	-.0750

MACH (2) = 2.999 BETAT (7) = 8.710

X/LB	1.039
PHI	
.000	-.0870
45.000	-.0750

MACH (3) = 3.502 BETAT (1) = -8.730

X/LB	1.039
PHI	
.000	-.1000
45.000	-.0540

MACH (3) = 3.502 BETAT (2) = -6.530

X/LB	1.039
PHI	
.000	-.0780
45.000	-.0670

MACH (3) = 3.502 BETAT (3) = -4.340

X/LB	1.039
PHI	
.000	-.1650
45.000	-.0790

AMES 87-757 IA9 CBA + S3 + T9 BODY FLAP (5NF14)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .550

X/LB	1.039
PHI	
.000	-.0510
45.000	-.0080

MACH (3) = 3.502 BETAT (5) = 4.450

X/LB	1.039
PHI	
.000	-.0580
45.000	-.0675

MACH (3) = 3.502 BETAT (6) = 6.660

X/LB	1.039
PHI	
.000	-.0695
45.000	-.0630

MACH (3) = 3.502 BETAT (7) = 8.880

X/LB	1.039
PHI	
.000	-.0730
45.000	-.0740

AMES 87-757 IA9 CBA + S3 + T9 BODY FLAP (SBNF15) (10 MAY 73)

REFERENCE DATA

SREF = 2.421% SQ.FT. XMRP = 28.53% INCHES
LREF = 39.84% INCHES YMRP = .0000 INCHES
BREF = 39.84% INCHES ZMRP = .0000 INCHES
SCALE = .03% SCALE

PARAMETRIC DATA

ALPHAT = 5.00 OPBINC = .500
RUDDER = -15.000 ELEVON = .000
SPOILR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.39% X/LB 1.039
PHI
.000 -.1040
45.000 -.1175

MACH (1) = 2.498 BETAT (2) = -6.28% X/LB 1.039
PHI
.000 -.0775
45.000 -.1280

MACH (1) = 2.498 BETAT (3) = -4.18% X/LB 1.039
PHI
.000 -.0660
45.000 -.1325

MACH (1) = 2.498 BETAT (4) = -.08% X/LB 1.039
PHI
.000 -.0525
45.000 -.1680

MACH (1) = 2.498 BETAT (5) = 4.31% X/LB 1.039
PHI
.000 -.0595
45.000 -.1740

MACH (1) = 2.498 BETAT (6) = 6.44% X/LB 1.039
PHI
.000 -.0780
45.000 -.1830

MACH (1) = 2.498 BETAT (7) = 8.57% X/LB 1.039
PHI
.000 -.0925
45.000 -.1920

MACH (2) = 2.999 BETAT (1) = -8.39% X/LB 1.039
PHI
.000 -.1020
45.000 -.1680

AMES 87-757 IA9 ORA + S3 + T9 BODY FLAP (R9NF15)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.400 X/LB 1.039
PHI
.000 -.0715
45.000 -.0850

MACH (2) = 2.999 BETAT (3) = -4.240 X/LB 1.039
PHI
.000 -.0850
45.000 -.0975

MACH (2) = 2.999 BETAT (4) = .080 X/LB 1.039
PHI
.000 -.0550
45.000 -.1090

MACH (2) = 2.999 BETAT (5) = 4.399 X/LB 1.039
PHI
.000 -.0840
45.000 -.0990

MACH (2) = 2.999 BETAT (6) = 8.575 X/LB 1.039
PHI
.000 -.0840
45.000 -.0980

MACH (2) = 2.999 BETAT (7) = 8.735 X/LB 1.039
PHI
.000 -.0810
45.000 -.0740

MACH (3) = 3.502 BETAT (1) = -8.715 //LB 1.039
PHI
.000 -.0790
45.000 -.0930

MACH (3) = 3.502 BETAT (2) = -8.525 X/LB 1.039
PHI
.000 -.0760
45.000 -.0640

MACH (3) = 3.502 BETAT (3) = -4.330 X/LB 1.039
PHI
.000 -.0800
45.000 -.0740

AMES 87-757 IA9 OEA + 33 + 79 BODY FLAP (SBNF15)

SECTION 1 :BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.962 BETAT (4) = .00 X/LB 1.039
PHI
.000 -.1480
45.000 -.0890

MACH (3) = 3.962 BETAT (5) = 4.48 X/LB 1.039
PHI
.000 -.0580
45.000 -.0620

MACH (3) = 3.962 BETAT (6) = 6.98 X/LB 1.039
PHI
.000 -.0680
45.000 -.0530

MACH (3) = 3.962 BETAT (7) = 9.00 X/LB 1.039
PHI
.000 -.0690
45.000 -.0720

AMES 87-757 IA9 OBA + S3 + T9 BODY FLAP (PBNF16) (15 MAY 79)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.539	INCHES
LREF =	39.849	INCHES	YMRP =	.000	INCHES
BREF =	39.849	INCHES	ZMRP =	.000	INCHES
SCALE =	.090	SCALE			

PARAMETRIC DATA

ALPHAT =	0.000	OFBINC =	.000
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.490 BETAT (1) = -8.370

X/LB	1.039
PHI	
.000	-.1650
40.000	-.1220

MACH (1) = 2.490 BETAT (2) = -6.270

X/LB	1.039
PHI	
.000	-.1630
40.000	-.1240

MACH (1) = 2.490 BETAT (3) = -4.180

X/LB	1.039
PHI	
.000	-.1490
40.000	-.1170

MACH (1) = 2.490 BETAT (4) = .080

X/LB	1.039
PHI	
.000	-.0970
40.000	-.0890

MACH (1) = 2.490 BETAT (5) = 4.330

X/LB	1.039
PHI	
.000	-.0480
40.000	-.0880

MACH (1) = 2.490 BETAT (6) = 6.480

X/LB	1.039
PHI	
.000	-.0750
40.000	-.0780

MACH (1) = 2.490 BETAT (7) = 8.600

X/LB	1.039
PHI	
.000	-.0710
40.000	-.0850

MACH (2) = 2.999 BETAT (1) = -8.530

X/LB	1.039
PHI	
.000	-.0790
40.000	-.0750

AMES 87-737 IA9 02A + S3 + T9 BODY FLAP (RBNF16)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.38D

X/LB	1.039
PHI	
.000	-.065D
45.000	-.088D

MACH (2) = 2.999 BETAT (3) = -4.23D

X/LB	1.039
PHI	
.000	-.057D
45.000	-.097D

MACH (2) = 2.999 BETAT (4) = .06D

X/LB	1.039
PHI	
.000	-.03 D
45.000	-.087D

MACH (2) = 2.999 BETAT (5) = 4.40D

X/LB	1.039
PHI	
.000	-.050D
45.000	-.049D

MACH (2) = 2.999 BETAT (6) = 6.58D

X/LB	1.039
PHI	
.000	-.057D
45.000	-.058D

MACH (2) = 2.999 BETAT (7) = 8.75D

X/LB	1.039
PHI	
.000	-.074D
45.000	-.072D

MACH (3) = 3.502 BETAT (1) = -8.69D

X/LB	1.039
PHI	
.000	-.078D
45.000	-.053D

MACH (3) = 3.502 BETAT (2) = -6.50D

X/LB	1.039
PHI	
.000	-.065D
45.000	-.062D

MACH (3) = 3.502 BETAT (3) = -4.32D

X/LB	1.039
PHI	
.000	-.047D
45.000	-.071D

AMES 87-797 IA9 C2A + S3 + T9 BODY FLAP (RBNF16)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .050

X/LB	1.039
PHI	
.000	-.0360
45.000	-.0780

MACH (3) = 3.502 BETAT (5) = 4.470

X/LB	1.039
PHI	
.000	-.0500
45.000	-.0570

MACH (3) = 3.502 BETAT (6) = 6.680

X/LB	1.039
PHI	
.000	-.0510
45.000	-.0490

MACH (3) = 3.502 BETAT (7) = 8.900

X/LB	1.039
PHI	
.000	-.0730
45.000	-.0690

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF17) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

PARAMETRIC DATA

ALPHAT =	-8.000	ORBINC =	.500
RUDDER =	-10.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.390

X/LB	1.039
PHI	
.000	-.1350
40.000	-.1300

MACH (1) = 2.499 BETAT (2) = -6.280

X/LB	1.039
PHI	
.000	-.1270
40.000	-.1420

MACH (1) = 2.498 BETAT (3) = -4.160

X/LB	1.039
PHI	
.000	-.1200
40.000	-.1530

MACH (1) = 2.498 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.1040
40.000	-.1490

MACH (1) = 2.498 BETAT (5) = 4.330

X/LB	1.039
PHI	
.000	-.1170
40.000	-.1060

MACH (1) = 2.499 BETAT (6) = 6.470

X/LB	1.039
PHI	
.000	-.1240
40.000	-.1090

MACH (1) = 2.499 BETAT (7) = 8.600

X/LB	1.039
PHI	
.000	-.1340
40.000	-.1320

MACH (2) = 2.999 BETAT (1) = -8.540

X/LB	1.039
PHI	
.000	-.1070
40.000	-.0830

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF17)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.240

X/LB	1.039
PHI	
.000	-.1030
45.000	-.0999

MACH (2) = 2.999 BETAT (3) = .060

X/LB	1.039
PHI	
.000	-.0970
45.000	-.1120

MACH (2) = 2.999 BETAT (4) = 4.415

X/LB	1.039
PHI	
.000	-.1050
45.000	-.1220

MACH (2) = 2.999 BETAT (5) = 8.780

X/LB	1.039
PHI	
.000	-.1190
45.000	-.1160

MACH (3) = 3.502 BETAT (1) = -8.700

X/LB	1.039
PHI	
.000	-.0780
45.000	-.0850

MACH (3) = 3.502 BETAT (2) = -6.510

X/LB	1.039
PHI	
.000	-.0800
45.000	-.0570

MACH (3) = 3.502 BETAT (3) = -4.320

X/LB	1.039
PHI	
.000	-.0770
45.000	-.0710

MACH (3) = 3.502 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.0790
45.000	-.0800

MACH (3) = 3.502 BETAT (5) = 4.490

X/LB	1.039
PHI	
.000	-.0770
45.000	-.0910

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF17)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.700

X/LB	1.039
PHI	
.000	-.0820
40.000	-.0870

MACH (3) = 3.502 BETAT (7) = 8.910

X/LB	1.039
PHI	
.000	-.0850
40.000	-.0820

AMES 87-707 IA9 ORA + S3 + T9 BODY FLAP (RBNF18) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	-4.000	ORBINC =	.500
RUDDER =	-1.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.420

X/LB	1.039
PHI	
.000	-.1270
40.000	-.1240

MACH (1) = 2.498 BETAT (2) = -6.300

X/LB	1.039
PHI	
.000	-.1190
40.000	-.1360

MACH (1) = 2.499 BETAT (3) = -4.180

X/LB	1.039
PHI	
.000	-.1210
40.000	-.1530

MACH (1) = 2.499 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.0890
40.000	-.1170

MACH (1) = 2.498 BETAT (5) = 4.310

X/LB	1.039
PHI	
.000	-.1110
40.000	-.0980

MACH (1) = 2.498 BETAT (6) = 6.430

X/LB	1.039
PHI	
.000	-.1180
40.000	-.1120

MACH (1) = 2.498 BETAT (7) = 8.560

X/LB	1.039
PHI	
.000	-.1240
40.000	-.1260

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.039
PHI	
.000	-.1020
40.000	-.0840

AMES 87-707 IA9 O2A + S3 + T9 BODY FLAP (RBNF18)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.260

X/LB	1.039
PHI	
.000	-.1020
40.000	-.1000

MACH (2) = 2.999 BETAT (3) = .060

X/LB	1.039
PHI	
.000	-.0970
40.000	-.1160

MACH (2) = 2.999 BETAT (4) = 4.390

X/LB	1.039
PHI	
.000	-.0980
40.000	-.0960

MACH (2) = 2.999 BETAT (5) = 8.720

X/LB	1.039
PHI	
.000	-.1020
40.000	-.0900

MACH (3) = 3.502 BETAT (1) = -8.730

X/LB	1.039
PHI	
.000	-.0830
40.000	-.0490

MACH (3) = 3.502 BETAT (2) = -6.530

X/LB	1.039
PHI	
.000	-.0840
40.000	-.0640

MACH (3) = 3.502 BETAT (3) = -4.330

X/LB	1.039
PHI	
.000	-.0780
40.000	-.0730

MACH (3) = 3.502 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.0740
40.000	-.0860

MACH (3) = 3.502 BETAT (5) = 4.470

X/LB	1.039
PHI	
.000	-.0780
40.000	-.0890

AMES 87-707 IA9 OBA + S3 + T9 BODY FLAP (RBNF18)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.670

X/LB	1.039
PHI	
.000	-.0870
40.000	-.0870

MACH (3) = 3.502 BETAT (7) = 8.670

X/LB	1.039
PHI	
.000	-.0870
40.000	-.0720

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AMES 87-707 IA9 CBA + S3 + T9 BODY FLAP

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5350	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHA =	.000	ORBINC =	.500
RUDDEF =	-10.000	ELEVON =	.000
RUDFLF =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.430

X/LB	1.039
PHI	
.000	-.1230
40.000	-.1220

MACH (1) = 2.499 BETAT (2) = -6.310

X/LB	1.039
PHI	
.000	-.1030
40.000	-.1370

MACH (1) = 2.499 BETAT (3) = -4.180

X/LB	1.039
PHI	
.000	-.0960
40.000	-.1480

MACH (1) = 2.499 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.0820
40.000	-.1090

MACH (1) = 2.499 BETAT (5) = 4.300

X/LB	1.039
PHI	
.000	-.1060
40.000	-.0870

MACH (1) = 2.499 BETAT (6) = 6.430

X/LB	1.039
PHI	
.000	-.1110
40.000	-.1040

MACH (1) = 2.498 BETAT (7) = 8.550

X/LB	1.039
PHI	
.000	-.1160
40.000	-.1090

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.039
PHI	
.000	-.0950
0.000	-.0800

AMES 87-707 IA9 CBA + S3 + T9 BODY FLAP (RBNF19)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.280

X/LB	1.039
PHI	
.000	-.0770
40.000	-.0990

MACH (2) = 2.999 BETAT (3) = .080

X/LB	1.039
PHI	
.000	-.0890
40.000	-.1150

MACH (2) = 2.999 BETAT (4) = 4.380

X/LB	1.039
PHI	
.000	-.0800
40.000	-.0770

MACH (2) = 2.999 BETAT (5) = 8.710

X/LB	1.039
PHI	
.000	-.0970
40.000	-.0830

MACH (3) = 3.502 BETAT (1) = -8.740

X/LB	1.039
PHI	
.000	-.0790
40.000	-.0510

MACH (3) = 3.502 BETAT (2) = -6.540

X/LB	1.039
PHI	
.000	-.0790
40.000	-.0610

MACH (3) = 3.502 BETAT (3) = -4.340

X/LB	1.039
PHI	
.000	-.0660
40.000	-.0740

MACH (3) = 3.502 BETAT (4) = .080

X/LB	1.039
PHI	
.000	-.0650
40.000	-.0860

MACH (3) = 3.502 BETAT (5) = 4.460

X/LB	1.039
PHI	
.000	-.0700
40.000	-.0700

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF19)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.660

PHI	X/LB 1.039
.000	-.0890
40.000	-.0690

MACH (3) = 3.502 BETAT (7) = 8.880

PHI	X/LB 1.039
.000	-.0860
40.000	-.0680

AMES 87-707 IA9 OEA + S3 + T9 BODY FLAP (3NF20) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

PARAMETRIC DATA

ALPHAT =	.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLG =	0		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.410

X/LB	1.039
PHI	
.000	-.1010
40.000	-.1210

MACH (1) = 2.499 BETAT (2) = -6.290

X/LB	1.039
PHI	
.000	-.0920
40.000	-.1290

MACH (1) = 2.499 BETAT (3) = -4.170

X/LB	1.039
PHI	
.000	-.0770
40.000	-.1320

MACH (1) = 2.499 BETAT (4) = .080

X/LB	1.039
PHI	
.000	-.0580
40.000	-.0890

MACH (1) = 2.499 BETAT (5) = 4.310

X/LB	1.039
PHI	
.000	-.0770
40.000	-.0740

MACH (1) = 2.499 BETAT (6) = 6.430

X/LB	1.039
PHI	
.000	-.0970
40.000	-.0950

MACH (1) = 2.499 BETAT (7) = 8.580

X/LB	1.039
PHI	
.000	-.1070
40.000	-.1020

MACH (2) = 2.999 BETAT (1) = -8.570

X/LB	1.039
PHI	
.000	-.0930
40.000	-.0780

AMES 87-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF2D)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.250

X/LB	1.039
PHI	
.000	-.0730
40.000	-.1030

MACH (2) = 2.999 BETAT (3) = .060

X/LB	1.039
PHI	
.000	-.0750
40.000	-.1150

MACH (2) = 2.999 BETAT (4) = 4.390

X/LB	1.039
PHI	
.000	-.0770
40.000	-.0670

MACH (2) = 2.999 BETAT (5) = 8.720

X/LB	1.039
PHI	
.000	-.0910
40.000	-.0800

MACH (3) = 3.502 BETAT (1) = -8.720

X/LB	1.039
PHI	
.000	-.0770
40.000	-.0550

MACH (3) = 3.502 BETAT (2) = -6.530

X/LB	1.039
PHI	
.000	-.0730
40.000	-.0630

MACH (3) = 3.502 BETAT (3) = -4.330

X/LB	1.039
PHI	
.000	-.0670
40.000	-.0730

MACH (3) = 3.502 BETAT (4) = .080

X/LB	1.039
PHI	
.000	-.0540
40.000	-.0850

MACH (3) = 3.502 BETAT (5) = 4.460

X/LB	1.039
PHI	
.000	-.0700
40.000	-.0760

AMES 87-707 IA9 OBA + S3 + T9 BODY FLAP (RBNF20)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.670

X/LB	1.039
PHI	
.000	-.0760
40.000	-.0590

MACH (3) = 3.502 BETAT (7) = 8.870

X/LB	1.039
PHI	
.000	-.0810
40.000	-.0750

AMES 87-707 IA9.CBA + S3 + T9 BODY FLAP (RBWF21) (10 MAY 75)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHA = [illegible] ORBINC = .500
RUDDER = +0.000 ELEVON = .000
RUDFLR = .000

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.390

X/LB	1.039
PHI	
.000	-.0870
40.000	-.1200

MACH (1) = 2.499 BETAT (2) = -6.280

X/LB	1.039
PHI	
.000	-.0780
40.000	-.1270

MACH (1) = 2.499 BETAT (3) = -4.170

X/LB	1.039
PHI	
.000	-.0650
40.000	-.1330

MACH (1) = 2.499 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.0540
40.000	-.0700

MACH (1) = 2.499 BETAT (5) = 4.310

X/LB	1.039
PHI	
.000	-.0650
40.000	-.0770

MACH (1) = 2.498 BETAT (6) = 8.440

X/LB	1.039
PHI	
.000	-.0810
40.000	-.0860

MACH (1) = 2.499 BETAT (7) = 8.570

X/LB	1.039
PHI	
.000	-.0910
40.000	-.0920

MACH (2) = 2.999 BETAT (1) = -8.550

X/LB	1.039
PHI	
.000	-.0890
40.000	-.0745

AMES 87-707 IA9 CBA + B3 + T9 BODY FLAP (RDNFZ1)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.240

X/LB	1.039
PHI	
.000	-.0695
40.000	-.1010

MACH (2) = 2.999 BETAT (3) = .060

X/LB	1.039
PHI	
.000	-.0580
40.000	-.1120

MACH (2) = 2.999 BETAT (4) = 4.400

X/LB	1.039
PHI	
.000	-.0610
40.000	-.0570

MACH (2) = 2.999 BETAT (5) = 8.730

X/LB	1.039
PHI	
.000	-.0630
40.000	-.0760

MACH (3) = 3.502 BETAT (1) = -8.710

X/LB	1.039
PHI	
.000	-.0750
40.000	-.0470

MACH (3) = 3.502 BETAT (2) = -6.510

X/LB	1.039
PHI	
.000	-.0710
40.000	-.0580

MACH (3) = 3.502 BETAT (3) = -4.320

X/LB	1.039
PHI	
.000	-.0530
40.000	-.0690

MACH (3) = 3.502 BETAT (4) = .080

X/LB	1.039
PHI	
.000	-.0440
40.000	-.0820

MACH (3) = 3.502 BETAT (5) = 4.470

X/LB	1.039
PHI	
.000	-.0620
40.000	-.0630

AMES 67-707 IA9 C2A + S3 + T9 BODY FLAP (RBNF21)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.670

X/LB	1.039
PHI	
.000	-.0700
40.000	-.0540

MACH (3) = 3.502 BETAT (7) = 8.890

X/LB	1.039
PHI	
.000	-.0770
40.000	-.0660

AMES 67-707 IA9 02A + S3 + T9 BODY FLAP (RBNF22) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	29.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	3.000	ORBINC =	.500
RUDDER =	-10.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.370

X/LB	1.039
PHI	
.000	-.0680
40.000	-.1230

MACH (1) = 2.499 BETAT (2) = -6.280

X/LB	1.039
PHI	
.000	-.0690
40.000	-.1330

MACH (1) = 2.499 BETAT (3) = -4.190

X/LB	1.039
PHI	
.000	-.0520
40.000	-.1170

MACH (1) = 2.499 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.0410
40.000	-.0690

MACH (1) = 2.499 BETAT (5) = 4.330

X/LB	1.039
PHI	
.000	-.0470
40.000	-.0640

MACH (1) = 2.499 BETAT (6) = 6.480

X/LB	1.039
PHI	
.000	-.0650
40.000	-.0730

MACH (1) = 2.499 BETAT (7) = 8.600

X/LB	1.039
PHI	
.000	-.0680
40.000	-.0850

MACH (2) = 2.999 BETAT (1) = -8.530

X/LB	1.039
PHI	
.000	-.0800
40.000	-.0770

AMES 87-707 IA9 02A + S3 + T9 BODY FLAP (RBNF22)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.230

X/LB	1.039
PHI	
.000	-.0550
40.000	-.0950

MACH (2) = 2.999 BETAT (3) = .060

X/LB	1.039
PHI	
.000	-.0370
40.000	-.0890

MACH (2) = 2.999 BETAT (4) = 4.400

X/LB	1.039
PHI	
.000	-.0520
40.000	-.0520

MACH (2) = 2.999 BETAT (5) = 8.750

X/LB	1.039
PHI	
.000	-.0750
40.000	-.0750

MACH (3) = 3.502 BETAT (1) = -8.680

X/LB	1.039
PHI	
.000	-.0710
40.000	-.0490

MACH (3) = 3.502 BETAT (2) = -6.490

X/LB	1.039
PHI	
.000	-.0610
40.000	-.0570

MACH (3) = 3.502 BETAT (3) = -4.310

X/LB	1.039
PHI	
.000	-.0440
40.000	-.0670

MACH (3) = 3.502 BETAT (4) = .060

X/LB	1.039
PHI	
.000	-.0300
40.000	-.0750

MACH (3) = 3.502 BETAT (5) = 4.480

X/LB	1.039
PHI	
.000	-.0450
40.000	-.0520

AMES 87-707 IA9 OBA + S3 + T9 BODY FLAP (RBNF22)

SECTION (1)BODY FLAP DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.750

	X/LB 1.039
PHI	
.000	-.0500
40.000	-.0440

MACH (3) = 3.502 BETAT (7) = 8.910

	X/LB 1.039
PHI	
.000	-.0710
40.000	-.0630

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM01) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

BETA = .000 ORBINC = .900
RUDDET = .000 ELEVON = .000
RUDFLP = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 ALPHAT(1) = -8.100

X/LB	1.001
PHI	
110.000	.0710
120.000	.0410

MACH (1) = 2.498 ALPHAT(2) = -6.070

X/LB	1.001
PHI	
110.000	.0770
120.000	.0200

MACH (1) = 2.498 ALPHAT(3) = -4.030

X/LB	1.001
PHI	
110.000	.0000
120.000	-.0020

MACH (1) = 2.498 ALPHAT(4) = -2.000

X/LB	1.001
PHI	
110.000	-.0430
120.000	-.0160

MACH (1) = 2.498 ALPHAT(5) = .000

X/LB	1.001
PHI	
110.000	-.0170
120.000	-.0290

MACH (1) = 2.498 ALPHAT(6) = 1.930

X/LB	1.001
PHI	
110.000	-.0640
120.000	-.0440

MACH (1) = 2.498 ALPHAT(7) = 3.900

X/LB	1.001
PHI	
110.000	-.0780
120.000	-.0520

MACH (1) = 2.498 ALPHAT(8) = 5.950

X/LB	1.001
PHI	
110.000	-.0220
120.000	-.0600

AMES 87-707 IA9 CEA + S5 + T9 CMB POD OUTSIDE (RUN06.1)

SECTION (1)CMB POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 ALPHAT(9) = 8.010

X/LB	1.001
PHI	
110.000	-.0040
120.000	-.0700

MACH (2) = 2.999 ALPHAT(1) = -8.070

X/LB	1.001
PHI	
110.000	.0220
120.000	.0450

MACH (2) = 2.999 ALPHAT(2) = -6.150

X/LB	1.001
PHI	
110.000	.0070
120.000	.0270

MACH (2) = 2.999 ALPHAT(3) = -4.070

X/LB	1.001
PHI	
110.000	-.0150
120.000	.0100

MACH (2) = 2.999 ALPHAT(4) = -2.000

X/LB	1.001
PHI	
110.000	-.0240
120.000	-.0000

MACH (2) = 2.999 ALPHAT(5) = -.010

X/LB	1.001
PHI	
110.000	.0040
120.000	-.0210

MACH (2) = 2.999 ALPHAT(6) = 1.930

X/LB	1.001
PHI	
110.000	-.0380
120.000	-.0260

MACH (2) = 2.999 ALPHAT(7) = 3.980

X/LB	1.001
PHI	
110.000	-.0480
120.000	-.0330

MACH (2) = 2.999 ALPHAT(8) = 5.990

X/LB	1.001
PHI	
110.000	-.0440
120.000	-.0410

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AMES 87-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (REDUCED)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 ALPHAT(9) = 8.000

X/LB	1.001
PHI	
110.000	-.0430
120.000	-.0460

MACH (3) = 3.502 ALPHAT(1) = -8.080

X/LB	1.001
PHI	
110.000	.0330
120.000	.0380

MACH (3) = 3.502 ALPHAT(2) = -6.080

X/LB	1.001
PHI	
110.000	.0080
120.000	.0130

MACH (3) = 3.502 ALPHAT(3) = -4.070

X/LB	1.001
PHI	
110.000	-.0130
120.000	-.0030

MACH (3) = 3.502 ALPHAT(4) = -2.020

X/LB	1.001
PHI	
110.000	-.0160
120.000	-.0100

MACH (3) = 3.502 ALPHAT(5) = -.030

B	1.001
I	
110.000	-.0280
120.000	-.0250

MACH (3) = 3.502 ALPHAT(6) = 1.950

X/LB	1.001
PHI	
110.000	-.0400
120.000	-.0320

MACH (3) = 3.502 ALPHAT(7) = 3.960

X/LB	1.001
PHI	
110.000	-.0140
120.000	-.0350

MACH (3) = 3.502 ALPHAT(8) = 5.970

X/LB	1.001
PHI	
110.000	-.0270
120.000	-.0420

AMES 97-707 IA9 02A + S3 + T9 OMS POD OUTSIDE (RBNM:1)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.902 ALPHAT(9) = 8.010

X/LB	1.001
PHI	
110.000	-.0300
120.000	-.0310

AMES 67-707 IA9 OEA + S3 + T9 OMS POD OUTSIDE (RENNUE) (10 MAY 73)

REFERENCE DATA

PARAMETRIC DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5350 INCHES	ALPHA* =	-3.000 ORBINC = .900
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES	RUDDER =	.000 ELEVON = .000
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES	RUDFLR =	.000
SCALE =	.0300 SCALE				

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.400

X/LB	1.001
PHI	
110.000	.0760
120.000	.0910

MACH (1) = 2.498 BETAT (2) = -6.280

X/LB	1.001
PHI	
110.000	.0540
120.000	.0720

MACH (1) = 2.498 BETAT (3) = -4.170

X/LB	1.001
PHI	
110.000	.1130
120.000	.0600

MACH (1) = 2.498 BETAT (4) = -2.060

X/LB	1.001
PHI	
110.000	.1020
120.000	.0560

MACH (1) = 2.498 BETAT (5) = 2.180

X/LB	1.001
PHI	
110.000	-.0010
120.000	.0300

MACH (1) = 2.498 BETAT (6) = 4.320

X/LB	1.001
PHI	
110.000	-.0060
120.000	.0060

MACH (1) = 2.498 BETAT (7) = 6.460

X/LB	1.001
PHI	
110.000	-.0090
120.000	-.0300

MACH (1) = 2.498 BETAT (8) = 8.590

X/LB	1.001
PHI	
110.000	-.0380
120.000	-.0560

AMES 67-707 IA9 CBA + S3 + T9 OMS POD OUTSIDE (RBNM02)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.001
PHI	
110.000	.1000
120.000	.1250

MACH (2) = 2.999 BETAT (2) = -8.400

X/LB	1.001
PHI	
110.000	.0750
120.000	.1030

MACH (2) = 2.999 BETAT (3) = -4.250

X/LB	1.001
PHI	
110.000	.0550
120.000	.0800

MACH (2) = 2.999 BETAT (4) = -2.100

X/LB	1.001
PHI	
110.000	.0400
120.000	.0630

MACH (2) = 2.999 BETAT (5) = 2.230

X/LB	1.001
PHI	
110.000	.0190
120.000	.0320

MACH (2) = 2.999 BETAT (6) = 4.400

X/LB	1.001
PHI	
110.000	.0250
120.000	.0130

MACH (2) = 2.999 BETAT (7) = 6.580

X/LB	1.001
PHI	
110.000	.0150
120.000	-.0190

MACH (2) = 2.999 BETAT (8) = 8.750

X/LB	1.001
PHI	
110.000	-.0040
120.000	-.0330

MACH (3) = 3.502 BETAT (1) = -8.710

X/LB	1.001
PHI	
110.000	.1350
120.000	.1600

AMES 87-7D7 IA9 02A + S3 + T9 OMS POD OUTSIDE (RBNMU2)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.520

X/LB	1.001
PHI	
110.000	.1140
120.000	.1070

MACH (3) = 3.502 BETAT (3) = -4.330

X/LB	1.001
PHI	
110.000	.0930
120.000	.0810

MACH (3) = 3.502 BETAT (4) = -2.140

X/LB	1.001
PHI	
110.000	.0690
120.000	.0560

MACH (3) = 3.502 BETAT (5) = 2.260

X/LB	1.001
PHI	
110.000	.0530
120.000	.0230

MACH (3) = 3.502 BETAT (6) = 4.480

X/LB	1.001
PHI	
110.000	.0430
120.000	.0010

MACH (3) = 3.502 BETAT (7) = 6.680

X/LB	1.001
PHI	
110.000	.0370
120.000	-.0080

MACH (3) = 3.502 BETAT (8) = 8.910

X/LB	1.001
PHI	
110.000	-.0160
120.000	-.0390

AMES 67-7D7 IA9 OEA + S3 + T9 OMS POD OUTSIDE (RBNM03) (10 MAY 75)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -5.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LB	1.001
PHI	
110.000	.0490
120.000	.0720

MACH (1) = 2.498 BETAT (2) = -6.290

X/LB	1.001
PHI	
110.000	.0250
120.000	.0500

MACH (1) = 2.498 BETAT (3) = -4.130

X/LB	1.001
PHI	
110.000	.0030
120.000	.0370

MACH (1) = 2.498 BETAT (4) = -2.070

X/LB	1.001
PHI	
110.000	.0860
120.000	.0340

MACH (1) = 2.498 BETAT (5) = 2.180

X/LB	1.001
PHI	
110.000	-.0160
120.000	.0090

MACH (1) = 2.498 BETAT (6) = 4.310

X/LB	1.001
PHI	
110.000	-.0220
120.000	-.0100

MACH (1) = 2.498 BETAT (7) = 6.440

X/LB	1.001
PHI	
110.000	-.0220
120.000	-.0430

MACH (1) = 2.498 BETAT (8) = 8.570

X/LB	1.001
PHI	
110.000	-.0480
120.000	-.0600

AMES 97-707 IA9 02A + S3 + T9 OMS POD OUTSIDE (RBNM03)

SECTION : 1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.570

X/LB	1.001
PHI	
110.000	.0900
120.000	.1000

MACH (2) = 2.999 BETAT (2) = -6.420

X/LB	1.001
PHI	
110.000	.0650
120.000	.0810

MACH (2) = 2.999 BETAT (3) = -4.260

X/LB	1.001
PHI	
110.000	.0860
120.000	.0620

MACH (2) = 2.999 BETAT (4) = -2.100

X/LB	1.001
PHI	
110.000	.0620
120.000	.0450

MACH (2) = 2.999 BETAT (5) = 2.220

X/LB	1.001
PHI	
110.000	.0260
120.000	.0190

MACH (2) = 2.999 BETAT (6) = 4.390

X/LB	1.001
PHI	
110.000	.0370
120.000	-.0020

MACH (2) = 2.999 BETAT (7) = 6.560

X/LB	1.001
PHI	
110.000	.0180
120.000	-.0310

MACH (2) = 2.999 BETAT (8) = 8.730

X/LB	1.001
PHI	
110.000	-.0140
120.000	-.0380

MACH (3) = 3.502 BETAT (1) = -8.730

X/LB	1.001
PHI	
110.000	.1250
120.000	.1240

AMES 87-707 IA9 C2A + S3 + T9 CMS POD OUTSIDE (RBAM03)

SECTION 1 1)CMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.530

X/LB	1.001
PHI	
110.000	.0940
120.000	.0960

MACH (3) = 3.502 BETAT (3) = -4.340

X/LB	1.001
PHI	
110.000	.0700
120.000	.0660

MACH (3) = 3.502 BETAT (4) = -2.140

X/LB	1.001
PHI	
110.000	.0580
120.000	.0380

MACH (3) = 3.502 BETAT (5) = 2.280

X/LB	1.001
PHI	
110.000	.0140
120.000	.0000

MACH (3) = 3.502 BETAT (6) = 4.470

X/LB	1.001
PHI	
110.000	.0270
120.000	-.0210

MACH (3) = 3.502 BETAT (7) = 6.680

X/LB	1.001
PHI	
110.000	-.0050
120.000	-.0240

MACH (3) = 3.502 BETAT (8) = 8.890

X/LB	1.001
PHI	
110.000	-.0440
120.000	-.0380

AMES 87-707 IA9 CBA + S3 + T9 OMS POD OUTSIDE (RBN9804) (10 MAY 73)

REFERENCE DATA

SREF =	2.4219 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.05 SCALE				

PARAMETRIC DATA

ALPHAT =	-4.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

X/LB	1.001
PHI	
110.000	.0240
120.000	.0490

MACH (1) = 2.498 BETAT (2) = -6.310

X/LB	1.001
PHI	
110.000	.0090
120.000	.0340

MACH (1) = 2.498 BETAT (3) = -4.190

X/LB	1.001
PHI	
110.000	-.0040
120.000	.0210

MACH (1) = 2.498 BETAT (4) = -2.070

X/LB	1.001
PHI	
110.000	-.0150
120.000	.0150

MACH (1) = 2.498 BETAT (5) = 2.180

X/LB	1.001
PHI	
110.000	-.0370
120.000	-.0120

MACH (1) = 2.498 BETAT (6) = 4.300

X/LB	1.001
PHI	
110.000	-.0400
120.000	-.0260

MACH (1) = 2.498 BETAT (7) = 6.430

X/LB	1.001
PHI	
110.000	-.0500
120.000	-.0590

MACH (1) = 2.498 BETAT (8) = 8.550

X/LB	1.001
PHI	
110.000	-.0590
120.000	-.0740

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNMU4)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.001
PHI	
115.000	.0710
120.000	.0810

MACH (2) = 2.999 BETAT (2) = -6.420

X/LB	1.001
PHI	
115.000	.0460
120.000	.0610

MACH (2) = 2.999 BETAT (3) = -4.260

X/LB	1.001
PHI	
115.000	.0250
120.000	.0410

MACH (2) = 2.999 BETAT (4) = -2.110

X/LB	1.001
PHI	
115.000	.0470
120.000	.0220

MACH (2) = 2.999 BETAT (5) = 2.210

X/LB	1.001
PHI	
115.000	-.0200
120.000	.0000

MACH (2) = 2.999 BETAT (6) = 4.380

X/LB	1.001
PHI	
115.000	-.0260
120.000	-.0200

MACH (2) = 2.999 BETAT (7) = 6.550

X/LB	1.001
PHI	
115.000	-.0390
120.000	-.0460

MACH (2) = 2.999 BETAT (8) = 8.710

X/LB	1.001
PHI	
115.000	-.0420
120.000	-.0580

MACH (3) = 3.582 BETAT (1) = -8.740

X/LB	1.001
PHI	
115.000	.1010
120.000	.0980

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM04)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.540

X/LB	1.001
PHI	
110.000	.0750
120.000	.0700

MACH (3) = 3.502 BETAT (3) = -4.340

X/LB	1.001
PHI	
110.000	.0530
120.000	.0490

MACH (3) = 3.502 BETAT (4) = -2.150

X/LB	1.001
PHI	
110.000	.0440
120.000	.0250

MACH (3) = 3.502 BETAT (5) = 2.260

X/LB	1.001
PHI	
110.000	-.0020
120.000	-.0110

MACH (3) = 3.502 BETAT (6) = 4.460

X/LB	1.001
PHI	
110.000	-.0070
120.000	-.0310

MACH (3) = 3.502 BETAT (7) = 6.660

X/LB	1.001
PHI	
110.000	-.0040
120.000	-.0350

MACH (3) = 3.502 BETAT (8) = 8.870

X/LB	1.001
PHI	
110.000	-.0300
120.000	-.0420

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM05) (10 MAY 73)

REFERENCE DATA

SREF = 2.421D SQ.FT. XMRP = 28.53DD INCHES
LREF = 39.849D INCHES YMRP = .DDDD INCHES
BREF = 39.849D INCHES ZMRP = .DDDD INCHES
SCALE = .D3DD SCALE

PARAMETRIC DATA

ALPHAT = -2.DDD ORBINC = .5DD
RUDDER = .DDD ELEVON = .DDD
RUDFLR = .DDD

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.49D BETAT (1) = -8.43D

X/LB	1.DD1
PHI	
115.DDD	.DD11
12D.DDD	.D31D

MACH (1) = 2.49D BETAT (2) = -6.31D

X/LB	1.DD1
PHI	
115.DDD	-.DD1D
12D.DDD	.D16D

MACH (1) = 2.49D BETAT (3) = -4.19D

X/LB	1.DD1
PHI	
115.DDD	-.D18D
12D.DDD	.DD1D

MACH (1) = 2.49D BETAT (4) = -2.07D

X/LB	1.DD1
PHI	
115.DDD	-.D34D
12D.DDD	-.D69D

MACH (1) = 2.49D BETAT (5) = 2.16D

X/LB	1.DD1
PHI	
115.DDD	-.D46D
12D.DDD	-.D24D

MACH (1) = 2.49D BETAT (6) = 4.3DD

X/LB	1.DD1
PHI	
115.DDD	-.D59D
12D.DDD	-.D4ED

MACH (1) = 2.49D BETAT (7) = 6.42D

X/LB	1.DD1
PHI	
115.DDD	-.D61D
12D.DDD	-.D68D

MACH (1) = 2.49D BETAT (8) = 8.54D

X/LB	1.DD1
PHI	
115.DDD	-.D84D
12D.DDD	-.D84D

AMES 07-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (RBNNUS)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.590

X/LB	1.001
PHI	
110.000	.0850
120.000	.0660

MACH (2) = 2.999 BETAT (2) = -6.440

X/LB	1.001
PHI	
110.000	.0700
120.000	.0430

MACH (2) = 2.999 BETAT (3) = -4.270

X/LB	1.001
PHI	
110.000	.0570
120.000	.0280

MACH (2) = 2.999 BETAT (4) = -2.110

X/LB	1.001
PHI	
110.000	.0470
120.000	.0040

MACH (2) = 2.999 BETAT (5) = 2.220

X/LB	1.001
PHI	
110.000	-.0330
120.000	-.0150

MACH (2) = 2.999 BETAT (6) = 4.370

X/LB	1.001
PHI	
110.000	-.0130
120.000	-.0310

MACH (2) = 2.999 BETAT (7) = 6.530

X/LB	1.001
PHI	
110.000	-.0250
120.000	-.0560

MACH (2) = 2.999 BETAT (8) = 8.700

X/LB	1.001
PHI	
110.000	-.0230
120.000	-.0670

MACH (3) = 3.502 BETAT (1) = -8.750

X/LB	1.001
PHI	
110.000	.0800
120.000	.0810

AMES 87-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (RBNM05)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.540

PHI	X/LB 1.001
110.000	.0570
120.000	.0580

MACH (3) = 3.502 BETAT (3) = -4.350

PHI	X/LB 1.001
110.000	.0280
120.000	.0310

MACH (3) = 3.502 BETAT (4) = -2.140

PHI	X/LB 1.001
110.000	.0250
120.000	.0210

MACH (3) = 3.502 BETAT (5) = 2.280

PHI	X/LB 1.001
110.000	-.0220
120.000	-.0220

MACH (3) = 3.502 BETAT (6) = 4.460

PHI	X/LB 1.001
110.000	-.0170
120.000	-.0410

MACH (3) = 3.502 BETAT (7) = 6.660

PHI	X/LB 1.001
110.000	-.0080
120.000	-.0440

MACH (3) = 3.502 BETAT (8) = 8.880

PHI	X/LB 1.001
110.000	-.0090
120.000	-.0540

AMES 87-707 IA9 OEA + S3 + T9 OMS POD OUTSIDE (RBNM06) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHA =	.000	ORBINC =	.500
RUDDER =	.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

X/LB	1.001
PHI	
110.000	.0000
120.000	.0190

MACH (1) = 2.498 BETAT (2) = -6.310

X/LB	1.001
PHI	
110.000	-.0180
120.000	.0010

MACH (1) = 2.498 BETAT (3) = -4.190

X/LB	1.001
PHI	
110.000	-.0330
120.000	-.0130

MACH (1) = 2.498 BETAT (4) = -2.070

X/LB	1.001
PHI	
110.000	-.0460
120.000	-.0210

MACH (1) = 2.498 BETAT (5) = 2.170

X/LB	1.001
PHI	
110.000	-.0560
120.000	-.0340

MACH (1) = 2.498 BETAT (6) = 4.290

X/LB	1.001
PHI	
110.000	-.0680
120.000	-.0510

MACH (1) = 2.498 BETAT (7) = 6.410

X/LB	1.001
PHI	
110.000	-.0800
120.000	-.0770

MACH (1) = 2.498 BETAT (8) = 8.540

X/LB	1.001
PHI	
110.000	-.1020
120.000	-.0950

AMES 87-737 IA9 CBA + S3 + T9 CMS POD OUTSIDE (RBNMD6)

SECTION (1)CMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.990

X/LB	1.001
PHI	
110.000	.0900
120.000	.0410

MACH (2) = 2.999 BETAT (2) = -6.430

X/LB	1.001
PHI	
110.000	.0640
120.000	.0270

MACH (2) = 2.999 BETAT (3) = -4.270

X/LB	1.001
PHI	
110.000	.0370
120.000	.0100

MACH (2) = 2.999 BETAT (4) = -2.110

X/LB	1.001
PHI	
110.000	.0230
120.000	-.0080

MACH (2) = 2.999 BETAT (5) = 2.210

X/LB	1.001
PHI	
110.000	.0330
120.000	-.0230

MACH (2) = 2.999 BETAT (6) = 4.370

X/LB	1.001
PHI	
110.000	.0080
120.000	-.0480

MACH (2) = 2.999 BETAT (7) = 6.530

X/LB	1.001
PHI	
110.000	-.0320
120.000	-.0650

MACH (2) = 2.999 BETAT (8) = 8.690

X/LB	1.001
PHI	
110.000	-.0460
120.000	-.0730

MACH (3) = 3.502 BETAT (1) = -8.750

X/LB	1.001
PHI	
110.000	.0710
120.000	.0670

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNMD6)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.550

X/LB	1.001
PHI	
110.000	.0460
120.000	.0420

MACH (3) = 3.502 BETAT (3) = -4.340

X/LB	1.001
PHI	
110.000	.0210
120.000	.0160

MACH (3) = 3.502 BETAT (4) = -2.150

X/LB	1.001
PHI	
110.000	.0070
120.000	-.0020

MACH (3) = 3.502 BETAT (5) = 2.260

X/LB	1.001
PHI	
110.000	.0000
120.000	-.0350

MACH (3) = 3.502 BETAT (6) = 4.450

X/LB	1.001
PHI	
110.000	-.0560
120.000	-.0520

MACH (3) = 3.502 BETAT (7) = 6.650

X/LB	1.001
PHI	
110.000	-.0640
120.000	-.0610

MACH (3) = 3.502 BETAT (8) = 8.650

X/LB	1.001
PHI	
110.000	-.0590
120.000	-.0640

AMES 87-707 IA9 ORA + S3 + T9 OMS POD OUTSIDE (RBNM07) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 2.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.430

X/LB	1.001
PHI	
110.000	-.0030
120.000	.0040

MACH (1) = 2.498 BETAT (2) = -6.310

X/LB	1.001
PHI	
110.000	-.0240
120.000	-.0100

MACH (1) = 2.498 BETAT (3) = -4.190

X/LB	1.001
PHI	
110.000	-.0430
120.000	-.0290

MACH (1) = 2.498 BETAT (4) = -2.060

X/LB	1.001
PHI	
110.000	-.0550
120.000	-.0330

MACH (1) = 2.498 BETAT (5) = 2.170

X/LB	1.001
PHI	
110.000	-.0670
120.000	-.0410

MACH (1) = 2.498 BETAT (6) = 4.290

X/LB	1.001
PHI	
110.000	-.0740
120.000	-.0580

MACH (1) = 2.498 BETAT (7) = 6.410

X/LB	1.001
PHI	
110.000	-.0880
120.000	-.0810

MACH (1) = 2.498 BETAT (8) = 8.540

X/LB	1.001
PHI	
110.000	-.1010
120.000	-.0970

AMES 87-707 IA9 CBA + S3 + T9 CMS POD OUTSIDE (RBNM07)

SECTION (1)CMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.590

X/LB	1.001
PHI	
110.000	.0890
120.000	.0320

MACH (2) = 2.999 BETAT (2) = -6.420

X/LB	1.001
PHI	
110.000	.0620
120.000	.0120

MACH (2) = 2.999 BETAT (3) = -4.270

X/LB	1.001
PHI	
110.000	.0370
120.000	-.0050

MACH (2) = 2.999 BETAT (4) = -2.110

X/LB	1.001
PHI	
110.000	.0070
120.000	-.0170

MACH (2) = 2.999 BETAT (5) = 2.210

X/LB	1.001
PHI	
110.000	.0240
120.000	-.0360

MACH (2) = 2.999 BETAT (6) = 4.370

X/LB	1.001
PHI	
110.000	-.0360
120.000	-.0480

MACH (2) = 2.999 BETAT (7) = 6.530

X/LB	1.001
PHI	
110.000	-.0740
120.000	-.0670

MACH (2) = 2.999 BETAT (8) = 8.690

X/LB	1.001
PHI	
110.000	-.0510
120.000	-.0740

MACH (3) = 3.502 BETAT (1) = -8.730

X/LB	1.001
PHI	
110.000	.0380
120.000	.0460

AMES 67-707 IA9 OBA + S3 + T9 OMS POD OUTSIDE (RBNM67)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.545

	X/LB 1.001
PHI	
110.000	.0160
120.000	.0240

MACH (3) = 3.502 BETAT (3) = -4.340

	X/LB 1.001
PHI	
110.000	-.0020
120.000	.0030

MACH (3) = 3.502 BETAT (4) = -2.140

	X/LB 1.001
PHI	
110.000	-.0220
120.000	-.0140

MACH (3) = 3.502 BETAT (5) = 2.250

	X/LB 1.001
PHI	
110.000	-.0490
120.000	-.0450

MACH (3) = 3.502 BETAT (6) = 4.460

	X/LB 1.001
PHI	
110.000	-.0540
120.000	-.0550

MACH (3) = 3.502 BETAT (7) = 6.660

	X/LB 1.001
PHI	
110.000	-.0730
120.000	-.0670

MACH (3) = 3.502 BETAT (8) = 8.850

	X/LB 1.001
PHI	
110.000	-.0720
120.000	-.0690

AMES 97-707 IA9 02A + S3 + T9 OMS POD OUTSIDE (RBNM08) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 4.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LB	1.001
PHI	
110.000	-.0190
120.000	-.0090

MACH (1) = 2.498 BETAT (2) = -6.300

X/LB	1.001
PHI	
110.000	-.0360
120.000	-.0260

MACH (1) = 2.498 BETAT (3) = -4.190

X/LB	1.001
PHI	
110.000	-.0490
120.000	-.0370

MACH (1) = 2.498 BETAT (4) = -2.070

X/LB	1.001
PHI	
110.000	-.0610
120.000	-.0450

MACH (1) = 2.498 BETAT (5) = 2.170

X/LB	1.001
PHI	
110.000	-.0780
120.000	-.0530

MACH (1) = 2.498 BETAT (6) = 4.300

X/LB	1.001
PHI	
110.000	-.0780
120.000	-.0650

MACH (1) = 2.498 BETAT (7) = 6.420

X/LB	1.001
PHI	
110.000	-.0950
120.000	-.0840

MACH (1) = 2.498 BETAT (8) = 8.550

X/LB	1.001
PHI	
110.000	-.1090
120.000	-.0960

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM08)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.001
PHI	
110.000	.0650
120.000	.0240

MACH (2) = 2.999 BETAT (2) = -6.420

X/LB	1.001
PHI	
110.000	.0600
120.000	.0000

MACH (2) = 2.999 BETAT (3) = -4.260

X/LB	1.001
PHI	
110.000	.0380
120.000	-.0130

MACH (2) = 2.999 BETAT (4) = -2.100

X/LP	1.001
PHI	
110.000	.0190
120.000	-.0270

MACH (2) = 2.999 BETAT (5) = 2.210

X/LB	1.001
PHI	
110.000	.0220
120.000	-.0390

MACH (2) = 2.999 BETAT (6) = 4.370

X/LB	1.001
PHI	
110.000	-.0650
120.000	-.0510

MACH (2) = 2.999 BETAT (7) = 6.540

X/LB	1.001
PHI	
110.000	-.0500
120.000	-.0680

MACH (2) = 2.999 BETAT (8) = 8.700

X/LB	1.001
PHI	
110.000	-.0350
120.000	-.0750

MACH (3) = 3.502 BETAT (1) = -8.720

X/LB	1.001
PHI	
110.000	.0320
120.000	.0380

AMES 67-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (RBNM08)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.539

X/LB	1.001
PHI	
110.000	.0090
120.000	.0140

MACH (3) = 3.502 BETAT (3) = -4.339

X/LB	1.001
PHI	
110.000	-.0100
120.000	-.0020

MACH (3) = 3.502 BETAT (4) = -2.140

X/LB	1.001
PHI	
110.000	-.0250
120.000	-.0190

MACH (3) = 3.502 BETAT (5) = 2.260

X/LB	1.001
PHI	
110.000	-.0560
120.000	-.0530

MACH (3) = 3.502 BETAT (6) = 4.460

X/LB	1.001
PHI	
110.000	-.0640
120.000	-.0620

MACH (3) = 3.502 BETAT (7) = 6.660

X/LB	1.001
PHI	
110.000	-.0730
120.000	-.0730

MACH (3) = 3.502 BETAT (8) = 8.860

X/LB	1.001
PHI	
110.000	-.0760
120.000	-.0730

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM09) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 6.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.410

X/LB	1.001
PHI	
110.000	-.0200
120.000	-.0160

MACH (1) = 2.498 BETAT (2) = -6.290

X/LB	1.001
PHI	
110.000	-.0380
120.000	-.0330

MACH (1) = 2.498 BETAT (3) = -4.170

X/LB	1.001
PHI	
110.000	-.0520
120.000	-.0440

MACH (1) = 2.498 BETAT (4) = -2.060

X/LB	1.001
PHI	
110.000	-.0650
120.000	-.0530

MACH (1) = 2.498 BETAT (5) = 2.180

X/LB	1.001
PHI	
110.000	-.0870
120.000	-.0640

MACH (1) = 2.498 BETAT (6) = 4.300

X/LB	1.001
PHI	
110.000	-.0810
120.000	-.0650

MACH (1) = 2.498 BETAT (7) = 6.440

X/LB	1.001
PHI	
110.000	-.0940
120.000	-.0810

MACH (1) = 2.498 BETAT (8) = 8.570

X/LB	1.001
PHI	
110.000	-.0990
120.000	-.0970

AMES 87-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (RBNM09)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.560

X/LB	1.001
PHI	
110.000	.0400
120.000	.0120

MACH (2) = 2.999 BETAT (2) = -6.400

X/LB	1.001
PHI	
110.000	.0590
120.000	-.0080

MACH (2) = 2.999 BETAT (3) = -4.250

X/LB	1.001
PHI	
110.000	.0310
120.000	-.0220

MACH (2) = 2.999 BETAT (4) = -2.100

X/LB	1.001
PHI	
110.000	.0220
120.000	-.0350

MACH (2) = 2.999 BETAT (5) = 2.210

X/LB	1.001
PHI	
110.000	-.0140
120.000	-.0410

MACH (2) = 2.999 BETAT (6) = 4.380

X/LB	1.001
PHI	
110.000	-.0150
120.000	-.0540

MACH (2) = 2.999 BETAT (7) = 6.550

X/LB	1.001
PHI	
110.000	-.0330
120.000	-.0620

MACH (2) = 2.999 BETAT (8) = 8.720

X/LB	1.001
PHI	
110.000	-.0560
120.000	-.0760

MACH (3) = 3.992 BETAT (1) = -8.710

X/LB	1.001
PHI	
110.000	.0230
120.000	.0230

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM09)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.510

X/LB	1.001
PHI	
110.000	.0020
120.000	.0070

MACH (3) = 3.502 BETAT (3) = -4.320

X/LB	1.001
PHI	
110.000	-.0180
120.000	-.0120

MACH (3) = 3.502 BETAT (4) = -2.130

X/LB	1.001
PHI	
110.000	-.0340
120.000	-.0290

MACH (3) = 3.502 BETAT (5) = 2.280

X/LB	1.001
PHI	
110.000	-.0520
120.000	-.0420

MACH (3) = 3.502 BETAT (6) = 4.470

X/LB	1.001
PHI	
110.000	-.0630
120.000	-.0580

MACH (3) = 3.502 BETAT (7) = 6.670

X/LB	1.001
PHI	
110.000	-.0790
120.000	-.0760

MACH (3) = 3.502 BETAT (8) = 8.880

X/LB	1.001
PHI	
110.000	-.0820
120.000	-.0780

AMES 87-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (RBNM1D) (1D MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 8.000 ORBINC = .500
RUDDER = .000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.380

X/LB	1.001
PHI	
110.000	-.0320
120.000	-.0270

MACH (1) = 2.498 BETAT (2) = -6.270

X/LB	1.001
PHI	
110.000	-.0480
120.000	-.0420

MACH (1) = 2.498 BETAT (3) = -4.170

X/LB	1.001
PHI	
110.000	-.0600
120.000	-.0540

MACH (1) = 2.498 BETAT (4) = -2.060

X/LB	1.001
PHI	
110.000	-.0710
120.000	-.0620

MACH (1) = 2.498 BETAT (5) = 2.180

X/LB	1.001
PHI	
110.000	-.0890
120.000	-.0670

MACH (1) = 2.498 BETAT (6) = 4.320

X/LB	1.001
PHI	
110.000	-.0890
120.000	-.0690

MACH (1) = 2.498 BETAT (7) = 6.450

X/LB	1.001
PHI	
110.000	-.1070
120.000	-.0810

MACH (1) = 2.498 BETAT (8) = 8.580

X/LB	1.001
PHI	
110.000	-.1020
120.000	-.0950

AMES 87-757 IA9 OEA + S3 + T9 OMS POD OUTSIDE (RB9M15)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (1) = -8.545

X/LB	1.001
PHI	
115.000	.0330
125.000	.0010

MACH (2) = 2.999 BETAT (2) = -6.395

X/LB	1.001
PHI	
115.000	.0560
125.000	-.0140

MACH (2) = 2.999 BETAT (3) = -4.245

X/LB	1.001
PHI	
115.000	.0270
125.000	-.0340

MACH (2) = 2.999 BETAT (4) = -2.095

X/LB	1.001
PHI	
115.000	.0080
125.000	-.0450

MACH (2) = 2.999 BETAT (5) = 2.230

X/LB	1.001
PHI	
115.000	-.0190
125.000	-.0510

MACH (2) = 2.999 BETAT (6) = 4.400

X/LB	1.001
PHI	
115.000	-.0360
125.000	-.0500

MACH (2) = 2.999 BETAT (7) = 6.570

X/LB	1.001
PHI	
115.000	-.0530
125.000	-.0590

MACH (2) = 2.999 BETAT (8) = 8.740

X/LB	1.001
PHI	
115.000	-.0780
125.000	-.0740

MACH (3) = 3.502 BETAT (1) = -8.695

X/LB	1.001
PHI	
115.000	.0150
125.000	.0150

AMES 87-707 IA9 02A + S3 + T9 OMS POD OUTSIDE (RBNM10)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (2) = -6.500

X/LB	1.001
PHI	
110.000	-.0010
120.000	-.0010

MACH (3) = 3.502 BETAT (3) = -4.310

X/LB	1.001
PHI	
110.000	-.0180
120.000	-.0180

MACH (3) = 3.502 BETAT (4) = -2.130

X/LB	1.001
PHI	
110.000	-.0330
120.000	-.0320

MACH (3) = 3.502 BETAT (5) = 2.260

X/LB	1.001
PHI	
110.000	-.0560
120.000	-.0440

MACH (3) = 3.502 BETAT (6) = 4.480

X/LB	1.001
PHI	
110.000	-.0550
120.000	-.0500

MACH (3) = 3.502 BETAT (7) = 6.690

X/LB	1.001
PHI	
110.000	-.0680
120.000	-.0590

MACH (3) = 3.502 BETAT (8) = 8.900

X/LB	1.001
PHI	
110.000	-.0790
120.000	-.0720

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM11) (15 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0390 SCALE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.490 BETAT (1) = -8.390

X/LB	1.001
PHI	
115.000	.1510
125.000	.0970

MACH (1) = 2.490 BETAT (2) = -6.270

X/LB	1.001
PHI	
115.000	.0990
125.000	.0750

MACH (1) = 2.490 BETAT (3) = -4.160

X/LB	1.001
PHI	
115.000	.1040
125.000	.0680

MACH (1) = 2.490 BETAT (4) = .040

X/LB	1.001
PHI	
115.000	.0930
125.000	.0440

MACH (1) = 2.490 BETAT (5) = 4.330

X/LB	1.001
PHI	
115.000	.0510
125.000	.0140

MACH (1) = 2.490 BETAT (6) = 6.460

X/LB	1.001
PHI	
115.000	.0680
125.000	-.0190

MACH (1) = 2.490 BETAT (7) = 8.600

X/LB	1.001
PHI	
115.000	.0570
125.000	-.0460

MACH (2) = 2.999 BETAT (1) = -8.560

X/LB	1.001
PHI	
115.000	.1460
125.000	.1200

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (SBNM11)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.410

X/LB	1.001
PHI	
110.000	.0760
120.000	.1580

MACH (2) = 2.999 BETAT (3) = -4.260

X/LB	1.001
PHI	
110.000	.1030
120.000	.0880

MACH (2) = 2.999 BETAT (4) = .050

X/LB	1.001
PHI	
110.000	.0920
120.000	.0470

MACH (2) = 2.999 BETAT (5) = 4.400

X/LB	1.001
PHI	
110.000	.0330
120.000	.0140

MACH (2) = 2.999 BETAT (6) = 6.580

X/LB	1.001
PHI	
110.000	.0180
120.000	-.0160

MACH (2) = 2.999 BETAT (7) = 8.750

X/LB	1.001
PHI	
110.000	-.0230
120.000	-.0330

MACH (3) = 3.502 BETAT (1) = -8.710

X/LB	1.001
PHI	
110.000	.1510
120.000	.1400

MACH (3) = 3.502 BETAT (2) = -6.520

X/LB	1.001
PHI	
110.000	.1280
120.000	.1120

MACH (3) = 3.502 BETAT (3) = -4.330

X/LB	1.001
PHI	
110.000	.1190
120.000	.0960

AMES 97-707 IA9 OEA + B3 + T9 OMS POD OUTSIDE (REMM11)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .055

X/LB	1.001
PHI	
115.000	.0755
125.000	.0370

MACH (3) = 3.502 BETAT (5) = 4.475

X/LB	1.001
PHI	
115.000	.0735
125.000	.0025

MACH (3) = 3.502 BETAT (6) = 6.695

X/LB	1.001
PHI	
115.000	.0565
125.000	-.0055

MACH (3) = 3.502 BETAT (7) = 8.955

X/LB	1.001
PHI	
115.000	.0170
125.000	-.0285

AMES 87-707 IA9 02A + S3 + T9 OMS POD OUTSIDE (RBNM12) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -4.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLP = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LB	1.001
PHI	
110.000	.0410
120.000	.0550

MACH (1) = 2.498 BETAT (2) = -6.300

X/LB	1.001
PHI	
110.000	.0330
120.000	.0410

MACH (1) = 2.498 BETAT (3) = -4.180

X/LB	1.001
PHI	
110.000	.0050
120.000	.0240

MACH (1) = 2.498 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	.0710
120.000	.0130

MACH (1) = 2.498 BETAT (5) = 4.310

X/LB	1.001
PHI	
110.000	.0320
120.000	-.0190

MACH (1) = 2.498 BETAT (6) = 6.430

X/LB	1.001
PHI	
110.000	.0260
120.000	-.0560

MACH (1) = 2.498 BETAT (7) = 8.560

X/LB	1.001
PHI	
110.000	-.0140
120.000	-.0660

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.001
PHI	
110.000	.1020
120.000	.0780

DATE 18 SEP 75 TABULATED PRESSURE DATA - IA9C (RBNM12)

AMES 87-737 IA9 02A + S3 + T9 CMS POD OUTSIDE

SECTION (1)CMS POD OUTSIDE DEPENDENT VARIABLE = CP

MACH (2) = 2.999 BETAT (2) = -5.430

X/LB	1.001
PHI	
110.000	.0810
120.000	.0560

MACH (2) = 2.999 BETAT (3) = -4.270

X/LB	1.001
PHI	
110.000	.0620
120.000	.0410

MACH (2) = 2.999 BETAT (4) = .050

X/LB	1.001
PHI	
110.000	.0520
120.000	.0160

MACH (2) = 2.999 BETAT (5) = 4.380

X/LB	1.001
PHI	
110.000	.0040
120.000	-.0140

MACH (2) = 2.999 BETAT (6) = 6.550

X/LB	1.001
PHI	
110.000	-.0330
120.000	-.0445

MACH (2) = 2.999 BETAT (7) = 8.710

X/LB	1.001
PHI	
110.000	-.0060
120.000	-.0530

MACH (3) = 3.502 BETAT (1) = -8.740

X/LB	1.001
PHI	
110.000	.0950
120.000	.1040

MACH (3) = 3.502 BETAT (2) = -6.540

X/LB	1.001
PHI	
110.000	.0850
120.000	.0750

MACH (3) = 3.502 BETAT (3) = -4.350

X/LB	1.001
PHI	
110.000	.0730
120.000	.0490

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RENM12)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .050

PHI	X/LB 1.001
110.000	.0610
120.000	.0080

MACH (3) = 3.502 BETAT (5) = 4.460

PHI	X/LB 1.001
110.000	.0620
120.000	-.0260

MACH (3) = 3.502 BETAT (6) = 6.660

PHI	X/LB 1.001
110.000	-.0310
120.000	-.0320

MACH (3) = 3.502 BETAT (7) = 8.860

PHI	X/LB 1.001
110.000	-.0450
120.000	-.0420

AMES 87-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (RBNM13) (15 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = .000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.420

X/LB	1.001
PHI	
115.000	.0210
120.000	.0250

MACH (1) = 2.498 BETAT (2) = -6.300

X/LB	1.001
PHI	
115.000	.0240
120.000	.0030

MACH (1) = 2.498 BETAT (3) = -4.180

X/LB	1.001
PHI	
115.000	.0680
120.000	-.0040

MACH (1) = 2.498 BETAT (4) = .060

X/LB	1.001
PHI	
115.000	-.0280
120.000	-.0170

MACH (1) = 2.498 BETAT (5) = 4.300

X/LB	1.001
PHI	
115.000	-.0660
120.000	-.0460

MACH (1) = 2.498 BETAT (6) = 6.420

X/LB	1.001
PHI	
115.000	-.0720
120.000	-.0680

MACH (1) = 2.498 BETAT (7) = 8.540

X/LB	1.001
PHI	
115.000	-.0110
120.000	-.0860

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.001
PHI	
115.000	.0040
120.000	.0470

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM13)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.420

X/LB	1.001
PHI	
110.000	.0590
120.000	.0330

MACH (2) = 2.999 BETAT (3) = -4.260

X/LB	1.001
PHI	
110.000	.0410
120.000	.0170

MACH (2) = 2.999 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	.0180
120.000	-.0120

MACH (2) = 2.999 BETAT (5) = 4.380

X/LB	1.001
PHI	
110.000	-.0460
120.000	-.0490

MACH (2) = 2.999 BETAT (6) = 6.540

X/LB	1.001
PHI	
110.000	-.0630
120.000	-.0580

MACH (2) = 2.999 BETAT (7) = 8.690

X/LB	1.001
PHI	
110.000	-.0650
120.000	-.0640

MACH (3) = 3.502 BETAT (1) = -8.750

X/LB	1.001
PHI	
110.000	.0460
120.000	.0540

MACH (3) = 3.502 BETAT (2) = -6.550

X/LB	1.001
PHI	
110.000	.0340
120.000	.0460

MACH (3) = 3.502 BETAT (3) = -4.350

X/LB	1.001
PHI	
110.000	.0210
120.000	.0200

AMES 87-7D7 IA9 OEA + S3 + T9 OMS POD OUTSIDE (RBNM13)

SECTION (1) OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .050

X/LB	1.001
PHI	
110.000	-.0260
120.000	-.0210

MACH (3) = 3.502 BETAT (5) = 4.450

X/LB	1.001
PHI	
110.000	.0260
120.000	-.0460

MACH (3) = 3.502 BETAT (6) = 6.650

X/LB	1.001
PHI	
110.000	-.0590
120.000	-.0590

MACH (3) = 3.502 BETAT (7) = 8.840

X/LB	1.001
PHI	
110.000	-.0550
120.000	-.0610

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM14) (10 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	4.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.410

X/LB	1.001
PHI	
110.000	.0150
120.000	.0020

MACH (1) = 2.498 BETAT (2) = -6.290

X/LB	1.001
PHI	
110.000	-.0040
120.000	-.0160

MACH (1) = 2.498 BETAT (3) = -4.180

X/LB	1.001
PHI	
110.000	-.0180
120.000	-.0290

MACH (1) = 2.498 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	-.0340
120.000	-.0440

MACH (1) = 2.498 BETAT (5) = 4.310

X/LB	1.001
PHI	
110.000	-.0780
120.000	-.0590

MACH (1) = 2.498 BETAT (6) = 6.430

X/LB	1.001
PHI	
110.000	-.0870
120.000	-.0750

MACH (1) = 2.498 BETAT (7) = 8.560

X/LB	1.001
PHI	
110.000	-.1050
120.000	-.0930

MACH (2) = 2.999 BETAT (1) = -8.560

X/LB	1.001
PHI	
110.000	.0880
120.000	.0290

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNM14)

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.4 0

X/LB	1.001
PHI	
110.000	.0590
120.000	.0070

MACH (2) = 2.999 BETAT (3) = -4.250

X/LB	1.001
PHI	
110.000	.0340
120.000	-.0080

MACH (2) = 2.999 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	-.0470
120.000	-.0270

MACH (2) = 2.999 BETAT (5) = 4.380

X/LB	1.001
PHI	
110.000	-.0630
120.000	-.0460

MACH (2) = 2.999 BETAT (6) = 6.550

X/LB	1.001
PHI	
110.000	-.0710
120.000	-.0610

MACH (2) = 2.999 BETAT (7) = 8.710

X/LB	1.001
PHI	
110.000	-.0820
120.000	-.0690

MACH (3) = 3.502 BETAT (1) = -8.730

X/LB	1.001
PHI	
110.000	.0520
120.000	.0390

MACH (3) = 3.502 BETAT (2) = -6.530

X/LB	1.001
PHI	
110.000	.0270
120.000	.0150

MACH (3) = 3.502 BETAT (3) = -4.340

X/LB	1.001
PHI	
110.000	.0140
120.000	-.0020

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM14)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .050

X/LB	1.001
PHI	
110.000	-.0080
120.000	-.0300

MACH (3) = 3.502 BETAT (5) = 4.450

X/LB	1.001
PHI	
110.000	-.0010
120.000	-.0560

MACH (3) = 3.502 BETAT (6) = 6.660

X/LB	1.001
PHI	
110.000	-.0280
120.000	-.0670

MACH (3) = 3.502 BETAT (7) = 8.860

X/LB	1.001
PHI	
110.000	-.0620
120.000	-.0700

AMES 87-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (RBNM15) (15 MAY 73)

REFERENCE DATA

SREF =	2.4210 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8495 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8495 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	6.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS POD OUTSIDE

DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.390

X/LB	1.001
PHI	
110.000	-.0220
120.000	-.0080

MACH (1) = 2.498 BETAT (2) = -6.260

X/LB	1.001
PHI	
110.000	-.0110
120.000	-.0270

MACH (1) = 2.498 BETAT (3) = -4.160

X/LB	1.001
PHI	
110.000	.0180
120.000	-.0410

MACH (1) = 2.498 BETAT (4) = .080

X/LB	1.001
PHI	
110.000	-.0280
120.000	-.0510

MACH (1) = 2.498 BETAT (5) = 4.310

X/LB	1.001
PHI	
110.000	-.0150
120.000	-.0590

MACH (1) = 2.498 BETAT (6) = 6.440

X/LB	1.001
PHI	
110.000	-.0190
120.000	-.0760

MACH (1) = 2.498 BETAT (7) = 8.570

X/LB	1.001
PHI	
110.000	-.1100
120.000	-.0820

MACH (2) = 2.999 BETAT (1) = -8.550

X/LB	1.001
PHI	
110.000	.0420
120.000	.0190

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C

AMES 87-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (RBNM15)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.450

X/LB	1.001
PHI	
110.000	.0560
120.000	-.0040

MACH (2) = 2.999 BETAT (3) = -4.240

X/LB	1.001
PHI	
110.000	.0280
120.000	-.0190

MACH (2) = 2.999 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	.0240
120.000	-.0350

MACH (2) = 2.999 BETAT (5) = 4.395

X/LB	1.001
PHI	
110.000	-.0200
120.000	-.0490

MACH (2) = 2.999 BETAT (6) = 6.575

X/LB	1.001
PHI	
110.000	-.0160
120.000	-.0580

MACH (2) = 2.999 BETAT (7) = 8.730

X/LB	1.001
PHI	
110.000	-.0320
120.000	-.0750

MACH (3) = 3.502 BETAT (1) = -8.719

X/LB	1.001
PHI	
110.000	.0530
120.000	.0310

MACH (3) = 3.502 BETAT (2) = -6.529

X/LB	1.001
PHI	
110.000	.0300
120.000	.0150

MACH (3) = 3.502 BETAT (3) = -4.339

X/LB	1.001
PHI	
110.000	.0110
120.000	-.0090

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RDNM15)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .050

PHI	X/LB 1.001
110.000	-.0150
120.000	-.0380

MACH (3) = 3.502 BETAT (5) = 4.460

PHI	X/LB 1.001
110.000	.0000
120.000	-.0520

MACH (3) = 3.502 BETAT (6) = 6.660

PHI	X/LB 1.001
110.000	-.0270
120.000	-.0670

MACH (3) = 3.502 BETAT (7) = 8.880

PHI	X/LB 1.001
110.000	-.0360
120.000	-.0710

AMES 87-707 IA9 02A + S3 + T9 OMS POD OUTSIDE (RBNM16) (10 MAY 73)

REFERENCE DATA

SREF =	2.4215 SQ.FT.	XMRP =	28.5300 INCHES		
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES		
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES		
SCALE =	.0300 SCALE				

PARAMETRIC DATA

ALPHAT =	8.000	ORBINC =	.500
RUDDER =	-15.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.498 BETAT (1) = -8.370

X/LB	1.001
PHI	
110.000	.0350
120.000	-.0250

MACH (1) = 2.498 BETAT (2) = -6.270

X/LB	1.001
PHI	
110.000	.0120
120.000	-.0330

MACH (1) = 2.498 BETAT (3) = -4.160

X/LB	1.001
PHI	
110.000	.0150
120.000	-.1460

MACH (1) = 2.498 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	-.0690
120.000	-.1610

MACH (1) = 2.498 BETAT (5) = 4.330

X/LB	1.001
PHI	
110.000	-.0590
120.000	-.0620

MACH (1) = 2.498 BETAT (6) = 6.460

X/LB	1.001
PHI	
110.000	-.1010
120.000	-.0780

MACH (1) = 2.498 BETAT (7) = 8.600

X/LB	1.001
PHI	
110.000	-.0730
120.000	-.0690

MACH (2) = 2.999 BETAT (1) = -8.530

X/LB	1.001
PHI	
110.000	.0430
120.000	.0050

AMES 87-757 IA9 02A + S3 + T9 OMS POD OUTSIDE (9BNM16)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -6.380

X/LB	1.001
PHI	
115.000	.0500
125.000	-.0120

MACH (2) = 2.999 BETAT (3) = -4.230

X/LB	1.001
PHI	
115.000	.0270
125.000	-.0270

MACH (2) = 2.999 BETAT (4) = .060

X/LB	1.001
PHI	
115.000	-.0420
125.000	-.0430

MACH (2) = 2.999 BETAT (5) = 4.400

X/LB	1.001
PHI	
115.000	-.0350
125.000	-.0430

MACH (2) = 2.999 BETAT (6) = 6.580

X/LB	1.001
PHI	
115.000	-.0240
125.000	-.0520

MACH (2) = 2.999 BETAT (7) = 8.750

X/LB	1.001
PHI	
115.000	-.0290
125.000	-.0640

MACH (3) = 3.502 BETAT (1) = -8.690

X/LB	1.001
PHI	
115.000	.0160
125.000	.0190

MACH (3) = 3.502 BETAT (2) = -6.500

X/LB	1.001
PHI	
115.000	.0290
125.000	.0010

MACH (3) = 3.502 BETAT (3) = -4.320

X/LB	1.001
PHI	
115.000	-.0150
125.000	-.0130

AMES 67-707 IA9 02A + S3 + T9 OMS POD OUTSIDE (RBNM16)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (4) = .050

PHI	X/LB 1.001
110.000	-.0150
120.000	-.0400

MACH (3) = 3.502 BETAT (5) = 4.470

PHI	X/LB 1.001
110.000	.0080
120.000	-.0500

MACH (3) = 3.502 BETAT (6) = 6.680

PHI	X/LB 1.001
110.000	-.0230
120.000	-.0610

MACH (3) = 3.502 BETAT (7) = 8.900

PHI	X/LB 1.001
110.000	-.0390
120.000	-.0680

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM17) (10 MAY 73)

REFERENCE DATA

SREF = 2.4210 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = -8.000 ORBINC = .500
RUDDER = -15.000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.390

X/LB	1.001
PHI	
110.000	.1520
120.000	.0930

MACH (1) = 2.499 BETAT (2) = -6.280

X/LB	1.001
PHI	
110.000	.1330
120.000	.0760

MACH (1) = 2.498 BETAT (3) = -4.160

X/LB	1.001
PHI	
110.000	.1090
120.000	.0650

MACH (1) = 2.498 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	.0920
120.000	.0410

MACH (1) = 2.498 BETAT (5) = 4.330

X/LB	1.001
PHI	
110.000	.0610
120.000	.0110

MACH (1) = 2.499 BETAT (6) = 6.470

X/LB	1.001
PHI	
110.000	.0590
120.000	-.0260

MACH (1) = 2.499 BETAT (7) = 8.600

X/LB	1.001
PHI	
110.000	.0320
120.000	-.0470

MACH (2) = 2.999 BETAT (1) = -8.540

X/LB	1.001
PHI	
110.000	.1490
120.000	.1280

AMES 67-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM17)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.240

X/LB	1.001
PHI	
110.000	.1070
120.000	.0910

MACH (2) = 2.999 BETAT (3) = .060

X/LB	1.001
PHI	
110.000	.0970
120.000	.0530

MACH (2) = 2.999 BETAT (4) = 4.410

X/LB	1.001
PHI	
110.000	.0740
120.000	.0130

MACH (2) = 2.999 BETAT (5) = 8.760

X/LB	1.001
PHI	
110.000	.0040
120.000	-.0310

MACH (3) = 3.502 BETAT (1) = -8.700

X/LB	1.001
PHI	
110.000	.1320
120.000	.1380

MACH (3) = 3.502 BETAT (2) = -6.510

X/LB	1.001
PHI	
110.000	.1080
120.000	.1130

MACH (3) = 3.502 BETAT (3) = -4.320

X/LB	1.001
PHI	
110.000	.0960
120.000	.0920

MACH (3) = 3.502 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	.0940
120.000	.0420

MACH (3) = 3.502 BETAT (5) = 4.490

X/LB	1.001
PHI	
110.000	.1080
120.000	.0070

AMES 67-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (RBNM17)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.700

X/LB	1.001
PHI	
110.000	.0490
120.000	.0010

MACH (3) = 3.502 BETAT (7) = 8.910

X/LB	1.001
PHI	
110.000	.0270
120.000	-.1220

AMES 87-707 IA9 OBA + S3 + T9 OMS POD OUTSIDE (RBNM18) (15 MAY 73)

REFERENCE DATA

SREF =	2.4215 SQ.FT.	XMRP =	28.5300 INCHES
LREF =	39.8490 INCHES	YMRP =	.0000 INCHES
BREF =	39.8490 INCHES	ZMRP =	.0000 INCHES
SCALE =	.0300 SCALE		

PARAMETRIC DATA

ALPHA =	-4.000	ORBINC =	.500
RUDDER =	-10.000	ELEVON =	.000
RUDPLR =	.000		

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.420

X/LB	1.001
PHI	
110.000	.1390
120.000	.0590

MACH (1) = 2.498 BETAT (2) = -6.300

X/LB	1.001
PHI	
110.000	.1050
120.000	.0390

MACH (1) = 2.499 BETAT (3) = -4.180

X/LB	1.001
PHI	
110.000	.0790
120.000	.0220

MACH (1) = 2.499 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	.0690
120.000	.0090

MACH (1) = 2.498 BETAT (5) = 4.310

X/LB	1.001
PHI	
110.000	.1050
120.000	-.0210

MACH (1) = 2.498 BETAT (6) = 6.430

X/LB	1.001
PHI	
110.000	-.0020
120.000	-.0580

MACH (1) = 2.498 BETAT (7) = 8.560

X/LB	1.001
PHI	
110.000	.0010
120.000	-.0710

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.001
PHI	
110.000	.1190
120.000	.0840

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM18)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.260

X/LB	1.001
PHI	
110.000	.0640
120.000	.0460

MACH (2) = 2.999 BETAT (3) = .060

X/LB	1.001
PHI	
110.000	.0520
120.000	.0170

MACH (2) = 2.999 BETAT (4) = 4.390

X/LB	1.001
PHI	
110.000	.0350
120.000	-.0150

MACH (2) = 2.999 BETAT (5) = 8.720

X/LB	1.001
PHI	
110.000	-.0410
120.000	-.0540

MACH (3) = 3.502 BETAT (1) = -8.730

X/LB	1.001
PHI	
110.000	.0830
120.000	.1020

MACH (3) = 3.502 BETAT (2) = -6.530

X/LB	1.001
PHI	
110.000	.0640
120.000	.0710

MACH (3) = 3.502 BETAT (3) = -4.330

X/LB	1.001
PHI	
110.000	.0540
120.000	.0520

MACH (3) = 3.502 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	.0550
120.000	.0110

MACH (3) = 3.502 BETAT (5) = 4.470

X/LB	1.001
PHI	
110.000	.0670
120.000	-.0180

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM18)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.670

X/LB	1.001
PHI	
115.000	.0120
120.000	-.0260

MACH (3) = 3.502 BETAT (7) = 8.870

X/LB	1.001
PHI	
115.000	.0100
120.000	-.0350

AMES 87-757 IA9 02A + 53 + T9 OMS POD OUTSIDE (EBNM19) (15 MAY 73)

REFERENCE DATA

SREF = 2.4219 SQ.FT. XMRP = 28.5350 INCHES
LREF = 39.8490 INCHES YMRP = .0000 INCHES
BREF = 39.8490 INCHES ZMRP = .0000 INCHES
SCALE = .0350 SCALE

PARAMETRIC DATA

ALPHA = .000 OMEGA = .500
RUDDEF = -11.000 ELEVON = .000
RUDFLT = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.430

X/LB	1.001
PHI	
115.000	.0540
120.000	.0240

MACH (1) = 2.499 BETAT (2) = -6.315

X/LB	1.001
PHI	
115.000	.0980
120.000	.0640

MACH (1) = 2.499 BETAT (3) = -4.185

X/LB	1.001
PHI	
115.000	.0630
120.000	-.0480

MACH (1) = 2.499 BETAT (4) = .080

X/LB	1.001
PHI	
115.000	-.0260
120.000	-.1240

MACH (1) = 2.499 BETAT (5) = 4.300

X/LB	1.001
PHI	
115.000	-.0380
120.000	-.1430

MACH (1) = 2.499 BETAT (6) = 6.435

X/LB	1.001
PHI	
115.000	-.0480
120.000	-.0710

MACH (1) = 2.498 BETAT (7) = 8.550

X/LB	1.001
PHI	
115.000	-.0600
120.000	-.0890

MACH (2) = 2.999 BETAT (1) = -8.580

X/LB	1.001
PHI	
115.000	.0840
120.000	.0480

AMES 97-757 IA9 ORA + S3 + T9 OMS POD OUTSIDE (RUN19)

SECTION (1:OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.260

X/LB	1.001
PHI	
115.000	-.0515
125.000	.0175

MACH (2) = 2.999 BETAT (3) = .150

X/LB	1.001
PHI	
115.000	.0190
125.000	-.0215

MACH (2) = 2.999 BETAT (4) = 4.380

X/LB	1.001
PHI	
115.000	.0430
125.000	-.0450

MACH (2) = 2.999 BETAT (5) = 8.710

X/LB	1.001
PHI	
115.000	.0630
125.000	-.0725

MACH (3) = 3.502 BETAT (1) = -8.740

X/LB	1.001
PHI	
115.000	.0575
125.000	.0695

MACH (3) = 3.502 BETAT (2) = -6.540

X/LB	1.001
PHI	
115.000	.0425
125.000	.0485

MACH (3) = 3.502 BETAT (3) = -4.340

X/LB	1.001
PHI	
115.000	.0250
125.000	.0225

MACH (3) = 3.502 BETAT (4) = .060

X/LB	1.001
PHI	
115.000	.0180
125.000	-.0185

MACH (3) = 3.502 BETAT (5) = 4.460

X/LB	1.001
PHI	
115.000	-.0475
125.000	-.0440

AMES 87-707 IA9 C2A + S3 + T9 ONS POD OUTSIDE (RBNM19)

SECTION (1)ONS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.660

X/LB	1.001
PHI	
110.000	-.0190
120.000	-.0500

MACH (3) = 3.502 BETAT (7) = 8.660

X/LB	1.001
PHI	
110.000	-.0140
120.000	-.0560

DATE 18 SEP 73 TABULATED PRESSURE DATA - 1A9C (RBNM20) (10 MAY 73)

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0300	SCALE			

PARAMETRIC DATA

ALPHAT =	4.000	ORBINC =	.500
RUDDER =	-10.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS POD OUTSIDE

DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.410

X/LB	1.001
PHI	
110.000	.0530
120.000	-.0050

MACH (1) = 2.499 BETAT (2) = -6.290

X/LB	1.001
PHI	
110.000	.0340
120.000	-.0160

MACH (1) = 2.499 BETAT (3) = -4.170

X/LB	1.001
PHI	
110.000	.0490
120.000	-.0290

MACH (1) = 2.499 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	-.0560
120.000	-.0430

MACH (1) = 2.499 BETAT (5) = 4.310

X/LB	1.001
PHI	
110.000	-.0420
120.000	-.0550

MACH (1) = 2.499 BETAT (6) = 6.430

X/LB	1.001
PHI	
110.000	-.0560
120.000	-.0750

MACH (1) = 2.499 BETAT (7) = 8.580

X/LB	1.001
PHI	
110.000	-.0980
120.000	-.0920

MACH (2) = 2.999 BETAT (1) = -8.570

X/LB	1.001
PHI	
110.000	.0870
120.000	.0270

AMES 87-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (RBNM2D)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.250

X/LB	1.001
PHI	
110.000	.0330
125.000	-.0110

MACH (2) = 2.999 BETAT (3) = .060

X/LB	1.001
PHI	
110.000	.0220
120.000	-.0270

MACH (2) = 2.999 BETAT (4) = 4.390

X/LB	1.001
PHI	
110.000	-.0050
120.000	-.0470

MACH (2) = 2.999 BETAT (5) = 8.720

X/LB	1.001
PHI	
110.000	-.0110
120.000	-.0740

MACH (3) = 3.302 BETAT (1) = -8.720

X/LB	1.001
PHI	
110.000	.0580
120.000	.0430

MACH (3) = 3.302 BETAT (2) = -6.530

X/LB	1.001
PHI	
110.000	.0330
120.000	.0210

MACH (3) = 3.302 BETAT (3) = -4.330

X/LB	1.001
PHI	
110.000	.0170
120.000	.0000

MACH (3) = 3.302 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	-.0050
120.000	-.0280

MACH (3) = 3.302 BETAT (5) = 4.460

X/LB	1.001
PHI	
110.000	.0180
120.000	-.0600

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNM2D)

AMES 67-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.670

X/LB	1.001
PHI	
110.000	.0300
120.000	-.0650

MACH (3) = 3.502 BETAT (7) = 8.870

X/LB	1.001
PHI	
110.000	-.0230
120.000	-.0610

AMES 87-707 IA9 OEA + S3 + T9 OMS POD OUTSIDE (RBNM21) (10 MAY 73)

REFERENCE DATA

SREF = 2.4215 SQ.FT. XMRP = 28.5300 INCHES
LREF = 39.8495 INCHES YMRP = .0000 INCHES
BREF = 39.8495 INCHES ZMRP = .0000 INCHES
SCALE = .0300 SCALE

PARAMETRIC DATA

ALPHAT = 5.000 ORBINC = .500
RUDDER = -1.000 ELEVON = .000
RUDFLR = .000

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.390

X/LB	1.001
PHI	
110.000	.0390
120.000	-.0120

MACH (1) = 2.499 BETAT (2) = -6.280

X/LB	1.001
PHI	
110.000	.0100
120.000	-.0290

MACH (1) = 2.499 BETAT (3) = -4.170

X/LB	1.001
PHI	
110.000	.0160
120.000	-.0420

MACH (1) = 2.499 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	.0000
120.000	-.0560

MACH (1) = 2.499 BETAT (5) = 4.310

X/LB	1.001
PHI	
110.000	-.0530
120.000	-.0630

MACH (1) = 2.498 BETAT (6) = 6.440

X/LB	1.001
PHI	
110.000	-.0930
120.000	-.0760

MACH (1) = 2.499 BETAT (7) = 8.570

X/LB	1.001
PHI	
110.000	-.0670
120.000	-.0880

MACH (2) = 2.999 BETAT (1) = -8.550

X/LB	1.001
PHI	
110.000	.0890
120.000	.0140

AMES 87-707 IA9 O2A + S3 + T9 OMS POD OUTSIDE (RBNM21)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.240

X/LB	1.001
PHI	
110.000	.0270
120.000	-.0210

MACH (2) = 2.999 BETAT (3) = .060

X/LB	1.001
PHI	
110.000	.0210
120.000	-.0370

MACH (2) = 2.999 BETAT (4) = 4.400

X/LB	1.001
PHI	
110.000	.0290
120.000	-.0470

MACH (2) = 2.999 BETAT (5) = 8.730

X/LB	1.001
PHI	
110.000	-.0420
120.000	-.0720

MACH (3) = 3.502 BETAT (1) = -8.710

X/LB	1.001
PHI	
110.000	.0600
120.000	.0360

MACH (3) = 3.502 BETAT (2) = -6.510

X/LB	1.001
PHI	
110.000	.0360
120.000	.0160

MACH (3) = 3.502 BETAT (3) = -4.320

X/LB	1.001
PHI	
110.000	.0[illegible]
120.000	-.0020

MACH (3) = 3.502 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	-.0130
120.000	-.0330

MACH (3) = 3.502 BETAT (5) = 4.470

X/LB	1.001
PHI	
110.000	.0140
120.000	-.0510

AMES 87-707 IA9 C2A + S3 + T9 OMS POD OUTSIDE (RBNM21)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.900 BETAT (6) = 6.670

X/LB	1.001
PHI	
110.000	-.0070
120.000	-.0660

MACH (3) = 3.900 BETAT (7) = 8.890

X/LB	1.001
PHI	
110.000	-.0320
120.000	-.0640

DATE 18 SEP 73 TABULATED PRESSURE DATA - IA9C (RBNM22) (10 MAY 73)

AMES 87-707 IA9 02A + S3 + T9 OMS POD OUTSIDE

REFERENCE DATA

SREF =	2.4210	SQ.FT.	XMRP =	28.5300	INCHES
LREF =	39.8490	INCHES	YMRP =	.0000	INCHES
BREF =	39.8490	INCHES	ZMRP =	.0000	INCHES
SCALE =	.0350	SCALE			

PARAMETRIC DATA

ALPHAT =	8.000	ORBINC =	.500
RUDDER =	-10.000	ELEVON =	.000
RUDFLR =	.000		

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (1) = 2.499 BETAT (1) = -8.370

X/LC	1.001
PHI	
110.000	.0320
120.000	-.0260

MACH (1) = 2.499 BETAT (2) = -6.260

X/LB	1.001
PHI	
110.000	.0130
120.000	-.0400

MACH (1) = 2.499 BETAT (3) = -4.150

X/LB	1.001
PHI	
110.000	.0170
120.000	-.0530

MACH (1) = 2.499 BETAT (4) = .060

X/LB	1.001
PHI	
110.000	-.0610
120.000	-.0650

MACH (1) = 2.499 BETAT (5) = 4.330

X/LB	1.001
PHI	
110.000	-.0890
120.000	-.0650

MACH (1) = 2.499 BETAT (6) = 6.460

X/LB	1.001
PHI	
110.000	-.0680
120.000	-.0760

MACH (1) = 2.499 BETAT (7) = 8.600

X/LB	1.001
PHI	
110.000	-.0970
120.000	-.0860

MACH (2) = 2.999 BETAT (1) = -8.530

X/LB	1.001
PHI	
110.000	.0890
120.000	.0030

AMES 87-707 IA9 OBA + S3 + T9 OMS POD OUTSIDE (R5NM22)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (2) = 2.999 BETAT (2) = -4.235

X/LB	1.001
PHI	
115.000	.0270
120.000	-.0250

MACH (2) = 2.999 BETAT (3) = .060

X/LB	1.001
PHI	
115.000	.0240
120.000	-.0440

MACH (2) = 2.999 BETAT (4) = 4.400

X/LB	1.001
PHI	
115.000	-.0290
120.000	-.0480

MACH (2) = 2.999 BETAT (5) = 8.750

X/LB	1.001
PHI	
115.000	-.0340
120.000	-.0690

MACH (3) = 3.502 BETAT (1) = -8.680

X/LB	1.001
PHI	
115.000	.0570
120.000	.0200

MACH (3) = 3.502 BETAT (2) = -6.490

X/LB	1.001
PHI	
115.000	.0340
120.000	.0030

MACH (3) = 3.502 BETAT (3) = -4.310

X/LB	1.001
PHI	
115.000	.0110
120.000	-.0110

MACH (3) = 3.502 BETAT (4) = .060

X/LB	1.001
PHI	
115.000	-.0090
120.000	-.0350

MACH (3) = 3.502 BETAT (5) = 4.480

X/LB	1.001
PHI	
115.000	.0120
120.000	-.0460

AMES 87-797 IA9 OBA + S3 + T9 OMS POD OUTSIDE (RBNM22)

SECTION (1)OMS POD OUTSIDE DEPENDENT VARIABLE CP

MACH (3) = 3.502 BETAT (6) = 6.700

X/LB	1.001
PHI	
115.000	.0350
120.000	-.0550

MACH (3) = 3.502 BETAT (7) = 8.910

X/LB	1.001
PHI	
115.000	-.0310
120.000	-.0630